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ESSAY : FINANCIAL MARKETS

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EDUCATIONAL ESSAY

FOR PRESENTATION TO THE FACULTY OF THE HOLY STATE UNIVERSITY

IN PARTIAL FULFILMENT OF THE REQUIREMENTS

FOR THE DEGREE OF

PhD

IN FINANCIAL ENGINEERING INCLUDING DEVELOPMENTAL FINANCE, RISK ASSESSMENTS AND FINANCIAL ANALYSIS

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ABSTRACT

In the academic research we have been involved, at the extent to be rewarded a PhD degree in Financial Engineering including Developmental Finance, Risk Assessments, and Financial Analysis, we are to study financial markets. Financial markets are in depth examined for its overall understanding and raison d'être. The insightful points of this essay are considered at its various and relevant components that are the stated chapters known as what are financial markets all about? Their various structure, instruments being used as well as the given shareholders operating within. Our curiosity also extended to establish the relationship between financial markets and the development process. Later on, we discovered that financial markets existence and development in the global economy is dependent on the milestone of financial theories regarded as the scientific interpretation of the various functioning of financial markets components and actors. As nothing on earth is perfect financial markets are facing serious challenges that we manage to present in the internal and external aspects. We forwardly led our refection by looming the horizons in presenting future prospects and relevant recommendations that are critical to assure global financial markets development. But apart from the fact financial markets are considered a bold tool for financial deepening, financial inclusion, and financial sector development as a whole particularly in high- income countries. But the task is still tedious for those low-income countries to reap the benefits of financial markets development on their own grounds since many sound economic and financial policies and appliances are still awaited in the aim of witnessing effective economic growth and prosperity.

INTRODUCTION

Financial markets play a vital role in allocating wealth and excess savings to productive ventures in the global economy. This crucial process takes on various appearances. Commercial banks seek for depositors' fund in the aim of lending them out to Business entrepreneurs who run manufacturing or services. As well as local buyers who finance construction and redevelopment. The process of transferring savings into investments or performing financial intermediation involves various stakeholders such as individuals, pension and mutual funds, banks, governments, insurance companies, industrial corporations, stock exchanges, over –the counter dealer networks, and others (Robert Dubil, 2004). Understanding financial markets call for describing them in depth. What therefore requires the followings insightful points? What are financial markets all about?(chapter 1). The structure of financial markets merits tobe clarified (chapter 2). Furthermore, the various instruments being used by the diverse stakeholders will be scrutinized (chapter 3). The various stakeholders of financial markets will not be put aside (chapter 4) as well as the given relationships that occur all along them. Financial markets are hosted within a financial place where the various interactions take place. Thus, bringing out the relationship between financial markets and the development process needs to be described as well (chapter 5). Better understanding financial markets

also rely on their theory description and analysis (chapter 6). As vibrant, financial markets challenges and pitfalls related to their development outlook need to be clearly addressed (chapter 7). In the aim of addressing these issues some future prospects and recommendations of financial markets will be critically highlighted (chapter 8) and conclusive words will summarize what has been discussed so far.

CHAPTER I: WHAT ARE FINANCIAL MARKETS ALL ABOUT?

A country's financial system is composed of entities that enhance the flow of funds from economic agents who have funds to invest to those who need funds to invest. Financial markets stand as the perfect place where this financial intermediation can be smoothly performed. Thus, investors exchange financial instruments in a financial market. In other words, financial markets are places where financial instruments are bought and sold. They stand as the economy's central nervous system, relaying and reacting to information quickly, allocating resources, and determining prices. In doing in this extent, financial markets enable both firms and individuals to find financing for their activities. When they are working well, new firms can start up and existing firms can grow. By keeping the costs of transactions as low as possible, financial markets promote economic efficiency. On the contrary, when financial markets cease to function properly, resources are no longer channeled to their best possible use; consequently, we all suffer (Stephen G.Cecchetti, Kermit L. Schoenholtz, 2015).

1. Definition of financial markets

A financial market is a market in which people trade financial securities, commodities, and other fungible items of value at low transactions costs and at prices that reflect supply and demand. Securities entail stocks and bonds and commodities include precious metals or agricultural goods. As a financial market is a market where financial instruments are exchanged or traded. Financial markets performed three major functions that merit to be disclosed. What role do financial markets play in today's economy? Why do developing countries struggle to establish stock exchanges even do they often have no stocks to trade on them?

2. Role and functions of financial markets

Financial markets play a key role in the economy by stimulating growth, influencing the economic performance of all the actors, affecting economic welfare. In terms of functions, financial markets do perform several functions that deserve to be underlined.

- Financial markets facilitate the transfer of savings from savers to investors

Money saved by economic agents as deposits within the banking system allow savers to become investors through the process of buying securities or stocks in the primary market performed by commercial banks who stand as brokers.

- Provide pricing information in the market

It means that transactions between buyers and sellers of financial instruments in a financial market determine the price of the traded asset.

- Liquidity

This function expresses an opportunity for investors to sell a financial instrument. Without liquidity an investor would be obliged to hold a financial instrument until conditions arise to sell it or the issuer is contractually obligated to pay it off

- Reduction of transaction costs.

For business ventures, the surviving institutions and instruments are those that have the lowest transaction costs.

Financial markets pursue a critical purpose that implies financial intermediation meaning the host financial intermediaries that are special financial entities which perform the role of efficient allocation funds, when they are conditions that stand as difficulties for lenders or investors of funds to deal directly with borrowers of funds in financial markets. Thus financial intermediaries gather depository institutions, insurance companies, regulated investment companies, investment banks, and pension funds. Their role is to create more favourable transaction terms than could be realized by lenders/investors and borrowers dealing directly with each other in the financial market (Valdone Darskuviene, 2010).

3. Purposes of financial markets

Financial markets follow several objectives that merit to be discussed in the following lines.

3.1 Financial markets help to finance the economy

They allow companies to finance themselves by raising capital, either selling shares (titles of property) or issuing bonds (titles of debt). This enhances companies to finance business growth and their projects, by having access to long-term finance, rather than short term finance that banks usually grant. For investors whether individual savers, institutions, banks, pension funds, etc…), financial markets offer the opportunity to invest capital in exchange for a financial return called a “dividend”, and the prospect of added value if their assets improve or gain credential. In short, financial markets put companies that need money in contact with economic agents who have funds to invest (Investopedia, 2018).

3.2 Financial markets help to finance states

States tax investors on the various revenues derived from their investments in financial markets, either through tax on financial transactions or tax on dividends earned by shareholders and capital gains. It is recognized that some investments offer tax benefits, investors who make use of simple securities accounts are taxed at a relatively high level on their profits, in line with their income tax rate. Besides

the tax on returns derived from financial transactions, financial markets also enable States and governments to finance themselves by issuing governments bonds. Likewise, savers lend money to the State for fixed remuneration, in the form of coupon, with longer or shorter repayment maturities (idem).

3.3 Financial markets help to provide liquidity

Financial markets are place where supply meets demand and henceforth they offer significant level of liquidity. They stand as reference markets for international investors to invest their capital. On daily basis, buyers and sellers throughout the world perform their transactions. They generate high level of liquidity which is beneficial for both companies and States as an indispensable means (idem).

3.4 Financial markets, a protective tool

Financial markets allow all investors in the market to protect themselves against a wide range of risks that is currency risk, interest rate risk, credit risk , etc…) in particular through the various derivatives. Thus, businesses use currency swaps to protect themselves against currency risk or interest risk swap to protect them against the interest rate risk. Derivatives such as futures options or forwards contracts are used as part of risk management. Financial markets allow all investors in the market to protect themselves against a wide range of risks that is interest rate, currency risk, price reduction risk, credit risk; etc…) in particular through the various derivatives.

3.5 Financial markets, a communicative instrument

Multinationals make use of financial markets as a communication tool in particular through advertising effects. Most of market players use financial markets for the usual function of raising funds. Large global companies use them to impress the competition. Likewise, financial markets also allow medium size companies to be internationally known in the aim of attracting more investors and customers (idem). Better understanding of financial markets requires a full study of its structure.

CHAPTER 2: STRUCURE OF FINANCIAL MARKETS

Understanding the structure of financial markets implies to clarify the types of markets operating in, the various sectors and participants moving inside

1. The types of financial markets

There are different ways to classify financial markets. They are classified in line with financial instruments they are trading, characteristics of services they deliver, trading procedures, essential market participants, and the origin of the markets as well.

Financial markets provide channels for allocation of savings to investments. These channels provide a wide range of assets to savers as well as various forms in which the investors can raise funds and decouple the acts of saving and investments. The financial markets have two major components:

The money market and capital market according to the features of services they deliver

1.1 The money market

It refers to the market where borrowers and lenders exchange short period funds to solve their liquidity shortages. Money market tools are mostly financial claims that show low default risks whose maturities are under a year and high marketability (Central Board of Secondary Education, 2007).

1.2 The Capital Market

The Capital market is a market for financial investments that are direct or indirect claims to capital. It is bigger than securities market and expresses all forms of lending and borrowing. The Capital Market comprises the complex of institutions and mechanisms through which

Intermediate term funds and long-term funds are pooled and made available to business,

Government and individuals. The Capital Market also gathers the way by which outstanding securities are transferred (idem).

In line with financial instruments that financial markets are trading, the securities market refers to the market for those financial instruments, obligations and claims are commonly and readily transferable by sale. According to the origin of the market, as well, it is considered two main markets.

1.3 The primary market

This market provides the channel for selling new securities. The issuer of securities sells them in the primary market to raise funds for investment purposes and to discharge some obligation. The primary market is also called the market for new.

1.4 The secondary market

It is a market that deals with securities previously issued. It enables those who hold securities to adjust their holdings in line with response to charges in their appraisal of risks and return. People also sell securities for cash in order to meet their liquidity needs. The secondary market is also called old market (idem).

The secondary market has further two components: the spot market and the forward market.

1.4.1 The spot market

In the spot market, securities are traded for immediate delivery and payment. Financial instruments used in the spot market are commodities and securities. Spot trades are made with spot prices. Spot price is a current price of a financial instrument. It is a price which a particular instrument can be sold or bought during a particular time and specified place (Investopedia, 2018).

1.4.2 The forward market

The forward market is a market where securities are traded for future delivery and payment. This market is further divided into Futures and options market also called derivatives markets. The various

types of markets found in financial markets enable to perform some relevant functions that merit to be clarified.

Furthermore, in line with characteristics of services delivered, financial markets entail several other markets that are described as follows.

1.4.3 The stock market

It is a series of exchanges where successful corporations go to raise large amounts of cash in order to expand. Stocks are also called shares since they express the ownership of a public corporation as they are sold to investors through broker dealers who are mostly banks be them commercial or investments ones. The investors profit when the companies increase their earnings which keep a given economy growing. Empirically it is easy to buy stocks, but requires a lot of knowledge and arbitration to buy stocks in the right company (Kimberly Amadeo, 2018).

1.4.4 The bond market

It stands as the market where organizations obtain very huge loans. Mostly when stock prices go up, bond prices go down. There are several types of bonds such as treasury bonds, corporate bonds, municipal bonds. Bonds also provide some of the liquidity that keeps the economy functioning smoothly.

2. Functions of financial markets

Financial markets perform six basic functions outlined as follows.

- Borrowing and lending implying that financial markets permit the transfer of funds (purchasing power) from one economic agent to another for either investment or consumption purposes.
- Price determination reveals that financial markets provide vehicles or channels by which prices are set both for newly issued financial assets and for the existing stock of financial assets.
- Information Aggregation and Coordination underline the issue where financial markets act as collectors and aggregators of information about financial asset values and the flow of funds from lenders to borrowers. Financial markets pool and communicate information about the issuers of financial instruments, summarizing it in the form of a price. Does a company have good prospects for the future and growth? If so, its stock price will be high; if not its stock price will be low. Is a borrower likely to repay a bond? The more likely repayment is, the higher the price of the bond. Obtaining the answers to these questions is time consuming and costly (G.Cecchetti, Kermit L. Schoenholtz Stephen,2015).
- Risk sharing meaning financial markets allow a transfer of risk from economic agents who undertake investments to those who provide funds for those investments.

- Liquidity stating that financial markets provide the holders of financial assets with luck to resell or liquidate these assets especially in the secondary market also known as old market.
- Financial markets perform efficiency in the extent of reducing transaction costs and information costs.

2.1 Features of a well-run financial market

- A well-run financial market shows up essential features that one expects financial markets to perform in a given economy. First financial markets must be designed to keep transaction costs low. Secondly, the information the financial markets gather, disclose and communicate must be both accurate and widely available. Analysts are expected to provide accurate information of the firms they have access to in order to allow financial markets to provide the correct prices for the given firms' stocks since the prices of financial instruments are the reflect of available information collected from the companies and at the reach of market participants. Securities prices express the link between the financial markets and the real economy ensuring that resources are allocated to their most efficient uses. Wrong information in the market leads to fake prices. Consequently the economy will not operate in an effective manner. Thus, this raises the issue of lenders or investors protection and repayments assurances. The investor's protection implies that borrowers should not express intention to collect funds from the lenders or investors without providing evidence and proofs to repay back the funds. Thus, governments are a key part of financial markets because they set and enforce rules of the game. Financial markets require a legal framework designed and supervised by the government in order to distortions among markets participants and information gap among investors. Empirically countries with sound investors protection and law enforcement have deeper and bigger financial markets than others where shortages and discrepancies are regular. Seeking for well-run financial statement leads us to examine the extent or the scope through which financial markets operate (Stephen .G.Cecchetti, Kermit L. Schoenholtz ,2015).

2.2 The size of financial markets

The scope of financial markets is a sort of dual extents that could be expressed in nationwide and international aspects. Estimating the size of financial markets is not an easy issue. Total capital market financing was approximately USD 6.5 trillion [i] in 2011, excluding purely domestic loans that were not resold in the form of securities. The following table presents the various transactions that took place in financial markets in USD trillions. According to the below table, it is noticed that in 2006, the various mentioned financial transactions reached a peak amounting USD 9,994 billion. This figure translates very serious amounts invested in financial markets by various economic agents worldwide derived from prosperous yearly economic activity. On the contrary, the situation is not the same in 2000 and 2011. In 2000, the global economic activity was not

thriving but seemingly expressing a kind of economic recession due to lack of investments in various economic components. The year 2008 showed a kind of slowdown economic performance expressing the beginning of the subprime crisis in the United States of American financial sector that generated to a worldwide economic slump henceforth derived from a worldwide financial crisis that showed financial distortion witness in the global financial system affecting interlinked international financial markets.

Net Repayments, USD billion

Elements	2000	2004	2006	2008	2011
International Bank Loans	714	1,343	2,816	-1,279	185
International bonds and notes	1,184	1,560	2,617	2,436	1, 212
International Money-market Instruments	87	61	168	82	-6
Domestic bonds and notes	865	2,461	2,322	2, 282	2,566
Domestic money-market Instruments	377	774	983	1,462	-611
International equity issues	318	214	371	392	485
Domestic equity issues	901	593	717	999	617
Total excluding domestic loans	4,410	7,006	9,994	6,374	4,448

Sources: Bank for International Settlements; World Federation of Exchanges; Thomson Reuters

2.2.1 The national scope of financial markets

Financial markets are a significant means by which savings be public or private are converted into productive investments. Consequently, well-functioning and efficient financial markets are part of stable economic growth, and relevant fluctuations in those markets can give rise to

macroeconomic shocks. The national extent of financial markets points out the horizons through which these markets act. In other words, it is all about the viability of financial markets at the national scale. From the angle of a small open economy the viability of financial markets can be viewed in three main respects.

Firstly, access of domestic investors to global capital markets. This implies the facility by which domestic investors have in selling stocks or shares in the capital market in order to raise funds and finance their daily activities. This viability of financial markets expresses the extent up to which financial markets can render services or facilities to given domestic economic agents.

Secondly, domestic issuers have continued access to reasonably priced capital. In this point, economic agents seeking for funds can require the contribution of those who are in excess of savings or liquidity. This financial need can be filled or satisfied by issuance of bonds by domestic issuers that is various in needs firms requesting money to finance their long-term projects or investments. In this extent, local financial markets provide a financial response by giving access to reasonable priced capital to borrowers or issuers. But since domestic financial markets may not be open to global perspectives, it may be difficult to issuers to witness a competitive financial place where capital prices could be negotiated at more moderate and affordable rates.

Thirdly, the employment and other spin-off benefits of having a developed domestic trading centre. In a small open economy, a developed domestic trading centre generates more advantages and opportunities as well. Financial transactions diversity provides jobs opportunities to the various stakeholders of securities both buying and selling processes. In addition a more developed domestic financial market increases the volume and helps reduce the volatility of capital flows to emerging markets. A developed domestic trading centre or financial market is synonymous to deeper and more liquid equity markets and better market infrastructure help attract capital inflows and capital volatility is reduced as a country becomes financially more open. Improvements in institutional quality are also associated with reductions in volatility (Charles Gaa, Robert Ogrodnick and Peter Thurlow, 2001).Developed local financial markets secure capital inflows availability and enhance financial sector stability. But international extent or viability of national financial markets also provides so many values that are needed to render a given local financial market more viable and effective.

2.2.2 The international extent of financial markets

Financial markets in their way forward, entail several international dimensions. In the international scale, financial markets interact with financial institutions in various financial instruments by making up the global financial system. Therefore the global financial system helps to boost economic growth and facilitates global trade (Anjan Thakor), 2015).Global financial markets with their interconnectedness delivered several cross-border issues.

Firstly, they are part of the global financial system which is vast and varied. It is composed of several many different types of financial institutions, as well as financial markets entailing stocks, bonds, commodities, and derivatives. The global capital market involves more than 46,000 traded stocks worth over USD 54 trillion. In 2012 the global bond market traded securities worth about USD 80 trillion, and the mutual funds industry traded about USD26.8 trillion entirely. Exchange-traded funds traded securities worth USD 2 trillion globally in 2012, and at the end of 2013 the national amount of over –the counter derivatives was about USD 710.2 trillion globally(idem).[ii]

Secondly, international financial markets as part of the global financial system promote economic growth by:- creating money and money-like claims; facilitating specialization and promote trade; facilitating risk management, enabling individuals and companies to be insured against adversity in bad states of the world, thereby increasing investment and global economic growth; mobilizing resources globally and thereby improving the effectiveness with which local challenges are met; obtaining information for the evaluation of business and individuals and allocating capital, thereby overcoming problems of asymmetric information that make it difficult or costly for individual and firms to obtain capital; and increasing the set of opportunities available to companies, entrepreneurs, and individuals to take part and contribute to global economic growth.

Thirdly, the high interconnectedness of the global financial system including financial markets deeply expresses the international dimension of financial markets thereby increasing their complexity and the need for international harmonization of regulation. For instance, if Canadian banks are subject to more regulation than banks elsewhere, there may be incentives for banking activities to migrate to jurisdictions with less stringent regulation. But failures in those jurisdictions can have global impact due to the interconnectedness that exists within the global financial system (idem).

Fourth, global financial markets help firms to raise capital. The liquidity and depth of the global financial markets help companies to reduce their capital costs, improve their access to financing, invest more, and grow.

Fifthly, the financial architecture refers to the composition of a country's financial system, particularly whether it is bank-dominated or market-dominated – helps economic growth. However, market-dominated financial systems are better at promoting technological and financial innovations.

Six, the global financial system promote global trade through financing mechanisms outside the banking system, such as trade credit. Trade credit is the extension of credit by a given firm to its customers. Companies in more -well- developed financial systems tend to use more bank debt relative to trade credit, and firms in less-developed financial systems mostly use trade credit . So, trade credit helps to make global financial system more efficient by substituting for bank credit when such substitution stands efficient.

Seventhly, large projects , including those of infrastructure, are often financed through private-public partnership involving project financing. Power and transportation projects dominate this market, and private-public partnerships have been proven generally useful. Global financial markets play a vital role in mobilizing funding for these development projects financing and strengthen the private-public partnership for pursuing development purposes.

Eightly, banks as well as financial markets are regulated, and in both cases regulators face tensions or hurdles in enforcing regulations that pull in opposite directions. Implementing regulation in order to achieve financial stability, and facing these difficulties leads to great interconnectedness in the global financial system.

Ninth, bank regulation has multiple purposes, and it is being increasingly harmonized, but the difficulty is that regulation may go too far. While regulation boosts economic growth to a given point, above this point the costs to banks of complying with these regulations exceed the benefits to society. In this extent, regulation harms economic growth and employment as well. This is the case when international regulators coordinate ineffectively and provide regulation in one jurisdiction that has extended effects in other jurisdictions.

Finally, market-based financing, commonly known as shadow banking – financial intermediaries other than commercial banks (eg: mutual funds, investments banks, hedge funds) – is growing more rapidly than traditional banking. By year end 2011, this sector was USD 67 trillion globally[iii]. In the United States of America, market-based finance is twice as big as depository banking. Shadow banks provide firms and households with valuable economic services (idem). Financial markets entail both national scope and international dimension through financial mechanisms portrayed the help of various financial instruments that merit to be scrutinized. The following chapter will examine in depth multiple financial instruments that are used in global financial markets.

CHAPTER 3: INSTRUMENTS USED IN FINANCIAL MARKETS

This chapter focuses on describing the various financial instruments that are being used in global financial markets. The description takes into account the nature of the financial tool, the inherent financial mechanism it bears, its various users of the financial instrument and the purpose it follows up. The financial system is composed of six parts each of which plays a fundamental role in our economy. Those parts are stated as follow: money, financial instruments, financial markets, financial institutions, government regulatory agencies, and central banks.

1. Features of financial instruments

Financial instruments entail several characteristics described as follows:

- Financial instruments stands as tools that transfer resources from savers to investors and to transfer risk to those who are best equipped to bear it (G.Cecchetti, Kermit L. Schoenholtz Stephen,2015).

- They are regarded as a written legal obligation that is subject to government enforcement. The enforceability of the obligation is an important characteristic of a financial of instrument. Lack of enforcement of specified terms implies the inexistence of a financial instrument.

-In addition, a financial instrument obligates one party to transfer something of value, mostly money to another party. The term party here implies a person, company, or government.

- Financial instruments specify the date in the future on which the payment will be made.

- A financial instrument specifies conditions under which a payment will be made.

- In many cases, financial instruments specify a number of possible contingencies under which one party is required to make a payment to another.

2. Uses of financial instruments

Financial instruments are securities stated as stocks, bonds or debts, and insurance. Stocks or shares are securities that imply ownership of the economic agent who has purchased them in legal terms. Whereas, bonds or debts are indebtedness securities that allow the owner the right to expect or receive something value especially money to be paid by the borrower in terms of interest rate standing as the costs of the money that has been granted to him. Insurance are acquired through a given subscription to an insurance policy in the aim of transferring a financial resource regarded by the insurer as an insurance premium and the transfer of risk related to an investment or a management of a business operation keeping inventories, managing cash, keeping a storing building in good shape, etc…

3. Types of financial instruments used in global financial markets

They are two fundamental classes of financial instruments. The first, underlying instruments also called primitive securities are used by savers/lenders to transfer resources directly to investors or borrowers. Through these instruments, the financial system improves the efficient allocation of resources in the real economy. The second class of financial instrument is known as derivative instruments. The most common example of derivatives are futures, options, and swaps. Mostly, derivatives specify a payment to be made between the person who sells the instrument and the person who buys it. The amount of payment depends on various factors associated with the price of the underlying asset. The primary use of derivatives is to shift risk among investors.

3.1 Primitive securities

Primitive securities are those financial instruments used primarily as stores of value.

3.1.1 Stocks or shares

A stock is a small piece of a firm that gives its holder the right to take part of its profit. The owner of a firm sells stocks as a means to raising funds to enlarge operations as well as a way of transferring risk of ownership to someone else. Buyers of stocks use them primarily as stores of wealth (G.Cecchetti, Kermit L. Schoenholtz Stephen, 2015).

In other words, a stock stands as a type of security that signifies ownership in a corporation and represents a claim on part of the corporation's assets and earnings. There are two main types of stock: common and preferred. Common stock usually entitles the owner to vote at shareholders' meetings and to receive dividends. On the other hand, preferred stock generally does not have voting rights, but has a higher claim on assets and earning than the common shares. For instance, owners of preferred stocks receive dividends before common shareholders and have priority in the event that a company goes bankrupt and is liquidated (Investopedia, 2018).

Likewise, shares are units of ownership interest like stocks do in a corporation or stand as financial asset that delivers an equal distribution in any profits, if any are declared, in the form of dividends. The two main types of shares are common shares and preferred shares. Authorized shares comprise the number of shares a company's board of directors may issue. Issued shares are composed of the number of shares that are given to shareholders and counted for purpose of ownership. Shareholders' ownership is affected by the number of authorized shares, shareholders may limit the number as they consider pertinent. In case shareholders want to increase the number of authorized shares, they hold a meeting to discuss the issue and establish an agreement. When they agree to increase the number of authorized shares, a formal request is made to the State or government officials through filing articles of amendment. Another financial asset standing as a primitive security is known as bond.

3.1.2 Bonds

Bonds are regarded as a form of loan. In exchange of obtaining funds nowadays, a corporation or government pledges to make payment in the future. While bond payments are often stated in fixed dollars, they might not need to be. Unlike, most bank loans, most bonds can be bought and sold in financial markets that are the secondary market. Like bank loans, bonds are used by the borrower to finance current company's operations and by the lender to store value.

To materialize the purchase of bonds by the investor or lender a particular document is delivered to him known as bond certificate. A bond certificate is a legal document describing the indebtedness of a borrower and the terms under which that indebtedness will be paid back to the investor. The entity or company that issues a bond certificate is referred to as the issuer. This certificate is also intended to show the ownership by an investor of the debt owed by the issuer. The terms of the arrangement are stated on the certificate, including the following:

-The name of the issuer

-The amount to be paid back to the investor (known as the face amount)

-The date of repayment

-The rate of interest to be paid on the borrowed funds

- A unique certificate identification number

If the bond is intended to be sold at a discount, rather than paying any interest, then no interest rate will be noted on the certificate. Other financial instruments constitute stores of value but are not mostly used in financial markets. They are: bank loans, home mortgages, asset- back securities. They are other financial instruments used primarily to transfer risk.

3.1.3 Futures contracts

A futures contract is an agreement between two parties to exchange a fixed quantity of commodity (such as sugar, corn) or an asset (such as a bond) at a fixed price on a set future date. Futures contracts always specify the price at which the transaction will take place. They are a type of derivative instrument since their value is based on the price of some other asset. Futures contract are used to transfer the risk of price fluctuations from one party to another.

3.1.4 Options

They also stand as derivative instruments like futures contracts. Options prices are based on the value of some underlying asset. Options provide the right to the holder, but not the obligation , to buy or sell a fixed quantity of the underlying asset at a predetermined rate either on a specified date or at any time during a specified period.

Other financial instruments are used in the financial system but not in financial markets as they aim of transferring risk to economic agents that are well equipped to bear and handle it. They are insurance contracts materialized by insurance policies. Their primary purpose is to assure that payments will be made under particular, and often rare, conditions. In addition, swaps contracts are the other financial instruments mostly exchanged in financial institutions swaps contracts are the expression of agreements to exchange two specific cash flows at certain times in the future. We could state interest rate swaps, currency swaps. The following table provides figures of the various instruments transacted in the world's financial markets.

The world's financial markets

Year end, USD trillion

Elements	2000	2004	2006	2008	2011
International bonds and notes	6.1	13.2	18.4	23.9	28.5
International money-markets	0.3	0.7	0.9	1.1	1.0

instruments					
Domestic bonds and notes	23.8	35.9	49.7	59.7	69.6
Domestic money-markets instruments	6.0	8.2	10.1	12.8	11.5
International banks loans	8.3	13.9	18.9	22.5	22.3
Equities	31.1	37.2	50.7	32.6	47.4
Total value outstanding	75.6	109.1	148.7	152.6	180.3

Source: bank for International Settlements; World Federation of Exchanges

The above table underlines world's financial markets transactions in the year period of 2000; 2004; 2006; 2008 and 2011. The curb that graphs these given figures is taking an increasing trend since the overall value outstanding is gradually increasing alongside the known years period. The peak of the graph is noticed in the year 2011where domestic bonds and loans stand at 69.6 USD trillion and equities at 47.4 USD trillion. This expresses the sound recovery of the various domestic financial markets where local savings have been used in acquiring securities and allowing the various domestic issuers to acquire funding in the domestic financial markets. On the contrary, in the early years of the table, international financial instruments are setting the pace in some extent by providing more substantial funding that is in 2000 that is 6.1 USD trillion international bonds and notes and international banks loans. The very case almost happens in 2004(Marc Levinson, 2014).

In practice, when an economic agent encounters a financial instrument for the first time, he or she or it should try to figure it out whether it is used primarily for storing values or for transferring risk . The determination of its value is synonymous to identifying its features. Financial markets make use of several financial instruments that we study in the aim of underlying their nature, the purpose they pursue and their various users. A better understanding of these financial instruments requires to distinguishing financial markets stakeholders.

CHAPTER 4: FINANCIAL MARKETS STAKEHOLDERS

The purpose of this chapter is to provide the insightful points related to the actors of financial markets. By stakeholders we mean the various participants of financial markets development process in the angle of their behaviour, job description, the interactions surrounding their commitments and relationships.

The various financial markets participants are scrutinized as follows.

1.The investors

They constitute the driving force behind financial markets. This driving force is the expression of the desire of investors to earn a return on their assets. This return is composed of two distinct components: yield and capital gains. Yield is regarded as the income the investor receives while owning an investment whereas capital gains are increases in the value of the investment itself; and are often not available to the owner until the investment is sold. Investors' preferences vary as to which type of return they prefer, and these preferences, in turn, will affect their investment decisions. Some financial – market products are deliberately designed to offer only gains and no yield, or vice versa, to satisfy these preferences. Investors can be divided broadly into two categories: individuals and institutional investors (Marc Levinson, 2014).

1.1Individual investors

They own a small proportion of financial assets. Most households in wealthier countries own some financial assets, often in the form of retirement savings or of shares in the employer of a household member. Most such holdings, however, are quite small, and their composition varies boldly from one country to another. Individual investors tend to be rational when investing in either stock market or bonds markets. Sometimes, they find themselves not always rational as one may think or assume. Individual investors might decide to purchase stocks or financial assets online. This purchase means has provided lower fees with advice. They might decide to join an investment club where advisory services will be provided to them with a reasonable cost. However, the individual investor can decide to solicit a broker's advisory service which is expensive but provide useful information and recommendation that protect him from greed and fear. In the USA, the Securities and Exchange Commission (SEC) offers helpful tips that allow the individual investors to select a good financial professional they can trust in the aim of making rational decision.

1.2 Institutional investors

Commonly, institutional investors imply insurance companies and other including high- frequency traders such as pension funds, hedge funds, investment funds, mutual funds, algorithm traders. The size of institutional investors varies greatly from country to country depending on the framework of the country's development of collective investment vehicles. For rational reason some institutional

investors might prefer to acquire bonds or loans instead of shares in financial markets There are several types of institutional investors whose characteristics merit to be described in the lines ahead.

1.2.1 Mutual funds

They are investment companies that typically accept an unlimited number of individual investments. The fund reveals the pursued strategy. The fund's managers purchase financial instruments appropriate to that strategy. The fund changes its portfolio from time to time. Investors wishing to enter or leave the unit trust must buy or sell the trust's shares from stockbrokers (idem).

1.2.2 Hedge funds

Hedge funds are a type of Investment Company. They can accept investments from only a small number of wealthy individuals or big institutions. They are freed from many types of regulation dedicated to protect consumers, capable to employ aggressive investment strategies such as using borrowed money to increase the amount invested and focusing investment on one or another type of asset rather than diversifying. This strategy could lead to very large returns or to result in sizeable losses implying the closure of the fund. Hedge funds have come under particular criticism since their fee framework may provide managers an ugly incentive to take large risks with investors' money since fund manager may share in their fund's gains but never its losses. In other words, hedge funds stand as alternative investments using pooled funds that employ several different strategies to earn active return, or alpha, for their investors. As we previously underline that they are aggressively managed, they make use of derivatives and leverage in both domestic and international markets aiming to generating high returns. It is relevant to lay emphasis on the point that hedge funds are generally only accessible to accredited investors as they require less SEC regulations than other funds. The hedge funds industry is set aside in the extent that they face less regulation than mutual funds and other investment vehicles.

1.2.3 Insurance companies

They are the most important type of institutional investor, owning one-third of all the financial assets owned by institutions. In the past, insurance companies were needed to support life insurance policies. The growth of pre-funded individual pensions has benefited insurance companies, since on retirement most workers use the money in their accounts to purchase annuities. Insurance companies are considered as financial intermediaries for several reasons. The first reason is that they receive funds from their clients for further investment. Many economic agents use insurance companies as institutions in which they invest most of their savings. Another reason stands on the point that these institutions place invested assets of one sector and invest them in another sector through financial markets by acquiring stocks in secondary market (Tatjana Piljan Ivan, Cogoljevic Dusan, Piljan, 2015).

1.2.4 Pension funds

They aggregate the retirement savings of a large number of workers. They are sponsored by an employer, a group of employers or a labour union. Pension funds do not allow individuals control over how their savings are invested, but they do typically offer a guaranteed benefit once the individual reaches retirement age. They are diminishing since individual pension gain favour.

1.2.5 Algorithmic traders

Also known as a high –frequency trading, has expanded dramatically in recent times as a result of increased computing power and the availability of low-cost, high-speed communications. Investors specializing in this type of trading programme computers to enter buy and sell orders automatically in an effort to exploit tiny price differences in securities and currency markets. They only control a tiny proportion of the world's financial assets, just account for a large proportion of trading.

1.2.6 Other institutions

Other types of institutions, such as banks, foundations and university endowment funds, are also significant players in financial markets (Marc Levinson, 2014) .There are other stakeholders in financial markets whom roles and tasks are very vital for the functioning of these markets. Their participation in financial markets development process merit to be examined.

2. Financial markets professionals

The dynamics of financial markets is also derived from the vitality of the various professionals whose actions and jobs descriptions are part of financial markets development process. We hereby clarify their related commitments. We divide professionals operating in financial markets into two parts. The first part is related to firms which professional take part into. The second part is all about individual professionals whose commitment is also significant.

2.1 firms operating in the financial markets

These firms are known as securities firms namely brokerages, investment banks, and mutual fund companies. They are regarded as institutional participants since they care about fundamental values of securities they transact.

2.1.1 Brokerages

A brokerage firm or simply brokerage is a financial institution that facilitates the buying and selling of financial securities between a buyer and a seller (Wikipedia, 2018). Brokerage firms serve a clientele of investors who trade public stocks and many other securities. Mostly, it is through the firm's agent known as stockbroker. Brokerage firm mostly undertakes more than simply carrying out a stock or bond trade. Brokerage staff is entrusted with the responsibility of seeking markets where they can deliver appropriate recommendations for selling and purchase of financial securities. Traditional brokerage firms have also become a source of up-to-date live stock prices and quotes. In addition to

buying and selling financial assets for its clients, transacts for its own account. In this extent, the brokerage firm is known as a broker-dealer, otherwise, they perform the role of market makers (idem).

2.1.2 Investments banks

Investments banks are financial institutions that are significantly necessary for large and emerging economies. They offer private, commercial and wealth management services as well as financial services to governments and large financial institutions, assisting leading financial and non-financial companies by offering specific advisory services and mitigating any form of financial exposure they may bear or incur through currency and commodity hedging and derivatives. Furthermore, they also play a relevant role in financial markets. Investments banks help customers raise funds in capital markets and assets for merger and acquisitions. Investments banks like Golman Sachs, JP Morgan Chase and Morgan Stanley are the conduit through which firms raise funds in the capital markets. Through their underwriting services, investments banks issue new stocks and a range of debt instruments. The underwriter guarantees the price of a new issue and then sells it to investors a higher rate, a practice called placing the issue.

2.1.3 Mutual funds

They offer liquidity services. Basically, their primary function is to pool the small savings of individuals in diversified portfolios that are made up of a wide variety of financial instruments which can be liquid. They provide advice to their retail customers (G.Cecchetti, Kermit L. Schoenholtz Stephen,2015). They are other stakeholders taking part in financial markets in the scope of individual professionals that will be examined in the lines ahead.

2.2 Individuals operating in financial markets

2.2.1 The retail investor

A retail investor is an individual investor possessing shares of a given security. Retail investors can be further divided into two categories of shares ownership.

-A beneficial shareholder is a retail investor who holds shares of their securities in the account of a bank or broker, also known as “in Street Name”. The broker is in possession of the securities on behalf of the underlying shareholder.

- A registered Shareholder is a retail investor who holds shares of their securities directly through the issuer or its transfer agent. Many registered shareholders have physical copies of their stock certificates.

Financial markets participants as a whole can be categorized into two classes. The first class is called investors vessels speculators. The second class is the one of institutional vessels retail.

An investor is any party that makes an investment. The term is applied to parties (people or companies) who purchase real estate, currency, commodity derivatives, personal property, equity or debt securities or other assets. A speculator at his side is an economic agent that performs speculation that is the purchase of an asset be it a commodity, goods or real estate) with the hope that it will become more valuable at a future date. Speculation is also the practice of engaging in risky financial instrument rather than chasing those financial securities where he can earn capital gains, dividends, or interest.

Institutional investor points out those economic agents like investments banks whose participation in financial markets is significant and more prominent than retailers since they perform so many actions making a bold in those markets namely acting on behalf of companies in financial markets in the buying and selling processes of financial securities. Mostly institutional investors are investment banks, insurance companies, retirement fund, hedge fund, mutual fund. Due to their sophistication, institutional investors may often participate in private placements of securities, in which certain aspects of the securities laws may be inapplicable. They act as the channels of financial transactions between investors and the businesses. They provide their assistance for transactions related to: banking, mutual funds, investments, pensions and also finding suitable and preferable investors for the emerging businesses (Wikipedia, 2018).

3.Regulators

Among regulators in financial markets, we name regulatory bodies and the central bank as well.

3.1 Regulatory bodies

Regulatory bodies play a significant role in financial markets since they act in the aim of adjusting the various shortcomings appearing on the ground in the wake of financial markets functioning. These shortcomings imply asymmetric information which is lack of equivalence of information contents between two parties to a common issue that affects each other's interests. In the country like the United States of America, the regulatory body in charge of regulatory financial transactions in various components of financial markets is the Securities and Exchange Commission (SEC). The SEC acts independently of the US government. It was founded by the Securities Exchange Act of 1934. The SEC enforces the federal securities laws and regulates the majority of the securities industry. Its regulatory coverage includes the U.S stock exchanges, options markets and options exchanges as well as all other electronic exchanges and other electronic securities markets. The SEC also regulates investments advisors who are not covered by the state regulatory agencies. (Michael Schmidt, 2017). Apart from asymmetric information that is fought against by the SEC, other irregularities are also combated such as insider offence which stands as a bad behavior performed by some investors on the ground through the process of collecting information or values trends of securities due to illegal access of companies information and speculation carried out on the ground because of illegal treatment of information related to other economic agents. In short, with insider information the investor could

potentially make larger profits than a typical investor could make. Apart from SEC there are other regulatory bodies acting in financial markets in the USA such as

3.2 The central Bank

It plays a vital role in financial markets development process. Since it brings in relevant reforms, making the financial system efficient as whole and financial markets in particular. Still in the USA, the central bank known as FED plays a crucial role in financial system development and stability. It promotes the financial system to be robust, prevent future financial crises not to happen and jeopardize financial markets vitality. Furthermore, the regulator challenge also stands in the extent of reducing systemic risk without rendering the financial system inefficient by prohibiting certain risky activities. Furthermore, the FED in this extent is called on to adjust the stance of monetary policy and parameters of how it supplies liquidity to banks and financial markets as well. These adjustments are designed in the aim of fostering price stability and maximum sustainable growth and to restore better functioning of financial markets in respect of these economic objectives (C. Peter Mccolough, 2007).

Before wrapping of this chapter it will be relevant to underline the issue of introduction process to financial markets.

4.Introduction process in financial markets

The purpose of this point is to come out with the process through which a company is introduced in the financial markets especially the stock market.

It should be understood that introduction to stock market happens in a marketplace that is a physical location such as New York Stock Exchange building in lower New Stock Exchange building in lower New York City where trading actually happens. This trading takes place in a market which implies all activities related to buying and selling of specific types of financial asset or instrument such as a stock or bond. Stocks markets are a central link between the financial world and the real economy. Stocks prices are fundamental to the functioning of a market-based economy. They reveal us the value of the companies that issued the stocks and allocate scarce investment resources.

4.1 Activities occurring in the primary market

The stock market is composed of the primary market where specific activities happen such as the creation of financial instruments such as stocks or bonds. Stocks are firstly sold in the primary market and the money perceived goes to the company that issues it. Only securities are sold in the primary market for entities that have issued them such as commercial companies, governmental bodies or nongovernmental Organizations (NGOs). After the stock is issued and sold in the primary market for the sake of the issuer, it is afterwards traded in the secondary market.

4.2 Activities occurring in the secondary market

When stocks are sold in the secondary market, the revenue generated to from the sale goes to the seller of the security, not the entity that initially issued it. In fact, the reason for secondary markets is to permit those who buy new issues of a security to end or reduce their ownership of a stock bond (before it matures) or a stock so long as the company continues to be in business (R. "Tee" William, 2011). Investors usually initiate securities purchases in the secondary market by calling a security brokerage house. After an account has been opened, a broker relays the client's order to a dealer making a market in the securities the investors want. Since the secondary market involves the trading of securities initially sold in the primary market, it provides liquidity to the individual who acquire these securities.

4.3 How is stock issued?

The company approaches an underwriter such an investment bank like JP Morgan who pours over their financial statements and determines the value of the business. The underwriter researches and discovers the average furniture stock is trading at 20 times earnings. A good investor' job is to identify those companies that are selling below their true worth and buy as much as they can. Stocks are issued to the underwriter who after having determined its price in line with the value of the company sells them at its level that is the primary market. Later on these stocks are sold to other investors through a broker help in the secondary market (Joshua Kennon, 2017). Since financial markets play a vital role in the economy, by connecting buyers and sellers of financial securities and affect development issues. It is critical to understand the link between financial markets and development.

CHAPTER V: FINANCIAL MARKETS AND DEVELOPMENT

The purpose of this chapter is to provide the relationship between financial markets and development as a whole. By development here, we firstly mean economic growth and the support of financial markets in backing development projects in the global economy as well as financing states.

1.The importance of capital accumulation

It is mostly recognized that the high rate of capital accumulation is necessarily sufficient for rapid economic development that is economically feasible. Furthermore, it is widely agreed that large amounts of capital are necessary in underdeveloped economies for capital deepening and capital widening (Sayre P. Schatz,1967).

It has been noticed that capital accumulation is not enough; even the extremely high rates of savings of many of the socialist economies have not managed to compensate for their lack of ability in allocating capital and these countries have, for the most part, not fared well(Joseph Stiglitz,1989).

2. The raison d'être of capital markets

Capital markets perform several critical roles. They aggregate savings and they allocate funds. In the wake of performing these functions, they choose not only among competing sectors, but also competing management teams firms (idem).

Financial markets are extremely important to the general health of an economy. With effective markets for credit and capital, borrowing and investment will be limited and the whole macro-economy can suffer. Financial markets often fail to form in command economies and in less developed economies causing low levels of investment and low growth rates. The reason for this latter situation is that less development economies companies do not present a sound credit rating that will allow them to easily get access to international financial markets. Otherwise having access to capital accumulation or lending mechanisms offered by financial markets is critical for any given economy or entity.

A well- developed financial system enhances not only economic growth but plays a vital and dynamic role in promoting development as a whole. In the view of underlining developments returns derived from financial markets. In the perspective of finding out the benefits of fnancial markets development really enables to detect the various development advantages that could be for the benefit of the entire economy.

3. Development incentives brought by financial markets development

More developed financial markets improve the allocation of resources to its most productive use. A stock market provides investors and entrepreneurs with a potential exit option and enables foreign capital inflows critical for emerging markets and transition economies.

Governments can issue bonds in the aim of raising funds and finance its development projects in the areas of roads, bridges, damps, hospitals, energy infrastructures, etc...

The development of financial markets provides diversified financial instruments that imply risks sharing (insurance policies), capital accumulation (stocks) and indebtedness (bonds). All these financial instruments allow the effective allocation of surplus resources to economic agents that are in shortage and well equipped to make a productive and developmental use of these resources within the global economy (Johan Fredholm, Benjamin Taghavi-Awal, 2006).

Furthermore, more developments benefits are derived from financial markets prior to the fact that financial markets themselves are taking the extent of development. These development points will be examined in the angle of development of capital or stock markets and bond markets development as well.

3.1 Development benefits brought by local capital and bonds markets blossoming

Local capital markets offer several benefits to borrower and investors, including governments. They provide for better risk sharing and a more efficient allocation of capital, and they improve the implementation of fiscal, monetary, and exchange rate policies. These benefits happen through a number of complementary channels.

Firstly, local bond markets allow governments to finance large fiscal deficits without having to resort to financial repression or foreign borrowing. In reality, the impetus for the development of local bond markets as typically comes from the government in order to facilitate the financing of large deficits. Financing budget deficits through financial repression by forcing local banks to hold government papers delays the development of domestic banking sector, and foreign borrowing in hard currency exposes countries to exchange rate risk (The Graduate Institute Geneva, 2014).

Secondly, the development of money and bonds markets supports the conduct of monetary policy. Money and bond markets provide instruments needed for the implementation of monetary policy and improve the transmission mechanism of such policy. Long term bonds also enhance sterilization operations carried out by the central bank since sterilization that relies exclusively on short-term instruments tends to drive up short-term interest rates and encourage their inflows into such instruments. Long-term bonds markets give valuable information for the conduct of monetary policy, including expectations about macroeconomic developments and reactions to monetary policy changes, and thus help the operation of monetary policy (idem).

Thirdly, developing local capital markets can improve the availability of long-term financing, allowing households and companies to better manage interest rate and maturity risk associated with long term investments such as investments in equipment, machinery, land, and buildings) by allowing for a better development of a local bond market and derivatives markets that back it. But the development of equity markets can also improve firms' access to long-term capital.

Fourthly, the development of local capital markets can improve access to currency financing. Local currency bond markets can provide currency investors, such as retail and institutional investors, a way to borrow or invest in local currency and better manage inflation and exchange rate risk. They also provide a safe alternative investment to local currency bank deposits. Therefore relatively to foreign currency markets, they can make the country less vulnerable to sudden stops and exchange rate shocks. Governments are also major beneficiaries of local currency bond markets due to the fact they allow them to finance fiscal deficits by borrowing from domestic markets without exchange rate risk exposure.

Fifthly, local capital markets allow for financial deepening alongside the development of banking markets, improving the efficiency of capital allocation in the economy. Bond finance stands as healthy competition to bank loans and offers relatively cheap financing to large, reputable firms that have the scale and credentials to tap long-term capital markets. And the discipline of the market will improve the quality and disclosure of information that firms provide to markets and firms' performance more generally.

Sixthly, local capital markets, when opened to foreign investments, increase financial integration by attracting foreign capital, which can lower the cost of capital for local firms and households and improve risk sharing across countries. This situation could also improve market access and relieve

credit constraints on small and medium-sized enterprises. However, the liberalization of financial markets can, also result in the migration of trading to international financial sectors, hampering domestic market development for instance high quality- firms may try to escape local markets, lowering the average quality of local issuances. The net effects of the internalization of financial markets on the local development of markets in developing economies and emerging markets are therefore ambiguous.

Finally, the development of local capital markets can enhance financial stability by promoting the ability of financial institutions to manage risk. For instance, interest rate derivatives can be used to manage interest rate risk and credit derivatives can be used to manage credit risk. Furthermore, a more diverse financial system that includes capital markets alongside banking markets tend to be more stable and better able to absorb shocks. To illustrate this point, bond markets can act as a "spare tyre" to bank finance in case of banking crises, so helping to absorb the shock of bank distress. For example, in the midst of the Korean financial crisis of 1998, corporate bond markets provide almost the funds raised by firms, with firms by passing a trouble banking system. This point generally stands for large firms (idem). Other contributions of financial markets enhancing economic development in some relevant extents are also critical to be raised.

3.2 The importance of financial market in economic growth

At this point, we underline the relevance of a financial system to seek for performance through the regulation and supervisory purposes. This means a good supervisory and regulatory process enhance financial markets functioning and its impact on economic development. The development of sophisticated derivatives instruments for instance has helped improve the allocation of risk in the economy and increase the efficiency of the saving-investment process (Stanley Fischer, 2003).

And to an important and increasing extent, the development of
Sophisticated derivative instruments has helped improve the allocation of risk in the economy, and increase the efficiency of the saving- investment process. Furthermore, for a given level of saving, more efficient financial intermediation increases the productivity of investment. This implies the financial statement such as 'the more efficient the financial system, the more rapid the growth rate'. This means a more structured and well-functioning financial system generates appropriate financial intermediation and sound economic growth and development as well. In practice, there are two views on the importance of the financial system during development. The first view is that the financial sector does not matter very much, and that any correlation between financial development and growth is a result of growth leading development (idem). The second view emphasizes that an efficient financial system is key to development. This highlights the point that a well financial architecture of a financial system is roadmap to economic development and development as a whole. Financial

markets promote economic growth by funding entrepreneurs and particularly by channeling capital to the entrepreneurs with high returns. By developing financial markets a country not only yield economic growth or development as a whole but it also reduces its vulnerability to financial crises. A sound regulatory and supervisory capacity of financial markets also stand as one of the factor that enhance development issues through financial markets well functioning.

3.3 The contribution of regulatory and supervisory bodies of financial markets in the economic development process

This point is mostly relevant for the developing world financial markets especially African financial markets. In this world region, it has been noticed that supervisory capacity remains low. Supervisory resources, including qualified staff and the availability of analytical tools are limited. Many regulators are not independent in their decision making, and legal frameworks often limit the corrective and remedial powers of supervisors. Furthermore, there is the current consensus on the potential of government activism to promote greater outreach of financial systems to the private sector. The question behind this point is how African government's officials can intervene to increase finance for productive private investment? So a government activism implies its deliberately intervention in the financial sector to promote the outreach of financial services to segments of the private sector that have been underserved in the aim of promoting development projects for the sake of involved economic agents. Thus, the contribution of regulatory and supervisory bodies is highly expected in the developing world be it in Africa or Asia in order to correct imperfections and inherent risks that might appear in financial markets within these world regions. Therefore such initiatives are supposed to bring efficiency in these financial markets for an effective financial intermediation of available resources leading to a productive use of these financial resources for economic development perspectives (Thorsten Beck, Samuel Munzele Maimbo, 2013).

3.4 The importance of local capital markets for financing development

A growing economy in need of new forms of financial intermediation to finance investments that are either too long-term or too risky for commercial banks stands as one of the most important drivers of capital markets growth. In order words fostering the development of capital markets can itself be a strong spur to innovation and economic growth. Financial markets are composed of both capital and money markets. Capital markets refer to markets

that trade financial instruments with maturities longer than one year. Meanwhile, money markets trade debt securities or instruments of maturities of a year or less.

Capital markets entail numerous beneficial features for different participants in the economy. For a given company or entity in need of funding, domestic capital markets provide an alternative source of funding that can complement bank financing. Capital markets can offer better pricing and longer maturities, as well as access to wider investor base. They can also provide funding for riskier activities that would traditionally not be served by the banking sector, and by doing so contribute significantly to innovation in an economy.

Meanwhile, some governments can access international capital markets, the development of local capital markets can increase access to local currency financing and thereby help manage foreign exchange risk and inflation better (International Financial Corporation, 2017). For governments, this is a valuable benefit since it can allow them to finance fiscal deficits by borrowing from local markets without exchange rate risk. The creation of local capital markets is enormously beneficial to governments attempting to finance development internally.

Furthermore, for local investors and savers, capital markets can offer more attractive investing opportunities – with better returns- than bank deposits, depending on risk profile, liquidity needs, and other factors. In addition, with a wider range of securities and instruments offered, capital markets can help investor diversify their portfolios and manage risk. This point is particularly relevant for institutional investors such as pension funds, insurance companies. In this respect, capital markets have a deeper impact on society. Through the use of derivatives, well-structured and developed markets provide risk management tools not only to market participants but also to end users as diverse as companies and agriculture producers. Capital markets development also provides benefits at the macroeconomic level by supporting monetary policy transmission which is facilitated through liquidity securities markets. As we previously mentioned, capital markets serve as a “spare tire for the financial sector, enhancing financial stability and reducing vulnerabilities to exchange rate shocks and sudden interruptions of capital flows. Moreover, some institutional partners such as The World Bank provide some technical assistance in the aim of backing local capital markets development through enhancing innovative global products to further catalyze local market blossoming. For instance in Kenya, the Treasury Mobile Direct project is focused on improving retail access to government instruments by distributing these tools through mobile phones.

Likewise, IFC plays a critical role in catalyzing capital markets development by investing in private sector transactions either as a sole investor or as an anchor investor in bonds, structured securities (securitizations across different asset classes), as a credit enhancer or anchor investor, and in new products, instruments and investments funds aimed at bringing new assets classes to the market or supporting strategic sectors with private financing. IFC also provides local currency solutions and credit enhancement to facilitate access to capital markets for its clients. To summarize it is recognized that capital markets rarely follows a linear path. Developing local capital markets and making greater use of them to fund private investment and strategic economic needs tends to happen in stages. Therefore, some sequencing of policies is essential. This is the case for true debt markets, which require well-functioning money markets to create government bond markets, and they in turn are essential for corporate bonds markets. Understanding the various linkages between different segments of the market and their building blocks is critical to ensuring a proper sequencing of policy and regulatory reforms (idem).

After having highlighted financial markets importance and structuring as a whole one may ask on which financial theory are financial markets principles based? The answer to this question will be discussed in-depth in the following chapter entitled the financial theory and financial markets.

CHAPTER 6: THE FINANCIAL THEORY AND FINANCIAL MARKETS

The aim of this chapter is to present the financial theory that is related to financial markets development. How the inherent theory expresses financial markets functioning and its various components and the interactions occurring among them.

Financial theory has developed very dynamically in the last 50 years. There has been a remarkable interaction between theory and practice. Academic research has contributed to our understanding of investor behavior and the functioning of financial markets. Likewise, academic research has also stimulated financial innovation and led to development of new financial instruments and markets as well. Particularly, important financial research areas in the past five decades have been portfolio theory, capital asset pricing theory, interest rate structure theory, capital structure theory, agency theory; efficient market theory, and option pricing and theory (Morten Balling, Ernest Gnan, 2013). All these theories are relevant in the extent of particular financial issues. We will discuss all these theories in this chapter. We opt to underlining their backgrounds or basics, profounders, limitations or shortages and perspectives or prospects will be examined in a different chapter. The most critical and

inherent ones to financial markets known as financial markets theory that present classical asset pricing theory that is a theory composed of milestone such as portfolio selection , risk aversion, fundamental asset pricing theorem, portfolio frontier CAPM, the Modigliani- Miller theorem, no arbitrage/risk neutral evaluation and information in financial markets. So the theory addresses the economic foundations of financial markets from a mathematically rigorous standpoint, and offers a self-contained critical discussion, based on empirical results. So studying this financial markets theory implies to present its historical context as a whole, for each related theory, emphasis will be placed on their profounder, basics or backgrounds, and the limitations as well the various challenges or limitations they face in a practical point of view. This financial theory entails or calls for taking into account all theories that express efficient and effective functioning of financial markets and enhance its development. These theories are reminded as follow: portfolio theory, capital asset pricing theory, interest rate structure theory, capital structure theory, agent theory, and efficient market theory.

1.The historic context of financial theory advent

Over the last decade, the profession's view of the relationship between financial development and economic growth has shifted from one calculated neglect to a broadly held though certainly not unanimous, view that financial system exert a first-order impact on economic growth. Similarly, Nobel laureate Robert Lucas[1] (1988) dismisses finance as playing a leading role in the process of economic growth. The law and finance theory's legal adaptability channel stresses different mechanisms through which legal tradition influences financial development from the political channel. The legal adaptability channel is different. It predicts that even after controlling for differences in government authority, legal tradition matters: differences in legal tradition influence legal system adaptability, which in turn shapes financial development. Also, it stresses that legal system adaptability, which in turn turns shapes financial development. In addition, it stresses that legal system adaptability influences the contracting environment beyond the protection of private property rights.

2. Portfolio theory

2.1 The theory profounder

[1] He is an American economist who won the 1995 Nobel Prize for Economics for developing and applying the theory of rational expectations, an econometric hypothesis. Lucas found that individual will offset the intended results of national fiscal and monetary policy by making private economic decision based on past experiences and anticipated results (Wikipedia, 2018).

The theory has been set up in 1952 by Harry Max Markowitz who published a path-breaking article. He was born in August 24, 1927. He is an American economist, and a recipient of the 1989 John Von Neumann Theory Prize and the 1990 Nobel Memorial Prize in Economic Sciences. The profounder of the portfolio theory is a professor of finance at the Rady School of Management at the University of California San Diego (UCSD). He is best known for his pioneering work in modern portfolio theory, studying the effects of asset risk, return, correlation and diversification on probable investment portfolio returns (Wikipedia, 2018).

2.2 Basics of the portfolio theory

The traditional application of one-dimensional investment criteria such as the Net Present (NPV) criterion should be replaced by two dimensions: Expected returns and risk defined as the standard deviation of the return distribution. Markowitz argued also that investors should not look at securities individually. It is unrealistic to assume that investors or investment advisors can predict the future return of individual stocks. However, based on empirical analysis of the co-variation of the returns of several securities, it is possible to make portfolio decisions, in which the incomplete correlation between the securities can be exploited for diversification. The focused of investors should be on the effect of combining securities. In a realistic setting, investors must make a trade-off between expected returns and risk. The available investment universe is represented by an efficient frontier with a slope and shape that reflects the interplay in the financial market between all investors with a varying degree of risk –aversion. If an individual investor wants higher expected return, he must accept a higher risk. It is an old saying that one should not put all one's eggs in one basket. In 1990, Markowitz received the Nobel Prize in economics for having developed a strong analytical basis for that wise recommendation, which can be followed by individuals, firms, mutual funds and institutional investors (Morten Balling, Ernest Gnan, 2013).

The background of the theory is deeply expressed in the following points.

2.2.1Risk and expected return

The portfolio theory also known as Modern Portfolio Theory assumes that investors are risk averse meaning that given two portfolios that offer the same expected return, investors will prefer the less risky on. So, an investor will take on increased risk only if compensated by higher expected returns. Conversely an investor who wants higher expected returns must accept more risk. The accurate trade-off will be the same for investors, but different investors will evaluate the trade-off based on individual risk aversion features. The implication is that a rational investor will not invest in a portfolio if a second portfolio exists with a more

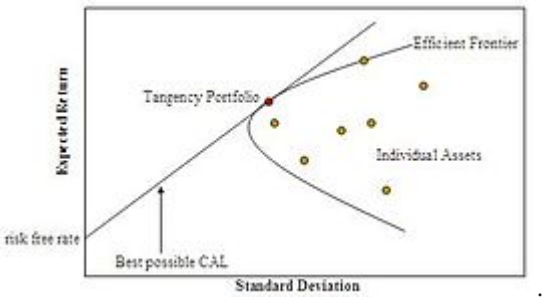
favorable risk-expected return profile that is if for a level of risk an alternative portfolio is available that has better expected returns.

2.2.2 Diversification

An investor can reduce portfolio risk simply by holding combinations of instruments that are not perfectly positively correlated. In other words, investors can reduce their exposure to individual asset risk by holding a diversified portfolio of assets. Diversification may allow for the same portfolio expected return with reduced risk. These ideas have been started with Markowitz and strengthen by other economists and mathematicians such as Andrew Brennan who have expressed ideas in the limitation of variance through portfolio theory.

An investor can reduce portfolio risk by holding combinations of instruments that are not perfectly. If all the asset pairs have correlations of 0 – they are perfectly uncorrelated – the portfolio's return variance is the sum over all assets of the square of the fraction held in the asset times the asset's return variance (and the portfolio standard deviation is the square root of this sum). All the asset pairs have correlations of 1 – they are perfectly positively correlated – then the portfolio return's standard deviation is the sum of the asset returns' standard deviations weighted by the fractions held in the portfolio. For given portfolio weights and given standard deviations of asset returns, the case of all correlations being 1 gives the highest possible standard deviation of portfolio return (Wikipedia, 2018) .

Efficient frontier with no risk-free asset[iv]



This graph shows expected return (vertical) versus standard deviation. This is called the 'risk-expected return space. Every possible combination of risky assets, can be plotted in this risk-expected return space, and the collection of all such possible portfolios defines a region in this space. The left boundary of this region is a hyperbola and the upper edge of this region is the efficient frontier in the absence of a risk-free asset (sometimes called "the Markowitz bullet"). Combinations along this upper edge represent portfolios (including no holding of the risk-free asset) for which there is lowest risk for a given level of expected return. Likewise, a portfolio lying on the efficient frontier represents the

combination offering the best possible expected return for given risk level. The tangent to the hyperbola at the tangency point indicates the best possible capital allocation line.

Please note that we do not highlight the mathematical aspects of the modern portfolio theory of Harry Max Markowitz. We have tried to underline the relevant points in an analytical manner in the aim of getting the insightful points that provide a better and simple understanding of the theory (Wikipedia, 2018).

2.2.3 Two mutual fund theorem

The theorem states that any portfolio on the efficient frontier can be generated by holding a combination of any two given portfolios on the frontier; the latter two given portfolios are the "mutual funds" in the theorem's name. Thus, in the absence of a risk-free asset, an investor can achieve any desired efficient portfolio even if all that is accessible is a pair of efficient mutual funds. If the location of the desired portfolio on the frontier is between the locations of the two mutual funds, both mutual funds will be held in positive quantities. If the desired portfolio is outside the range spanned by the two mutual funds, then one of the mutual funds must be sold short (held in negative quantity) while the size of the investment in the other mutual fund must be greater than the amount available for investment (the excess being funded by the borrowing from the other fund) (idem).

2.2.4 Criticisms

Despite the importance of the Modern portfolio theory, critics have arisen to challenge it in some relevant extents that are highlighted as follows.

-The question whether the Modern Portfolio Theory is an ideal investment instrument because its model of financial market does not match the real world in many ways. The risk return and correlation measures used by MPT are based on expected values, which means that they are mathematical statements about the future. In practice, investors must substitute predictions based on historical measurements of assets return and volatility for these values. Very often such expected values fail to take into consideration new circumstances that did not exist when the historical data were generated.

-More basically, investors are stuck with estimating key parameters from past market data because MPT attempts to model risk in terms of the likelihood of losses, but says nothing about why those losses might happen.

3. The Capital Asset Pricing Theory

3.1 The theory profounders

- William F. Sharpe is an American economist born on June 16 , 1934 in Boston Massachussetts, United States of America. He is the winner of the 1990 Nobel Memorial Prize in Economic Sciences. He is the STANCO 25 Professor of Finance, Emeritus at Stanford University's Graduate School of Business. He was one of the originators of the capital asset pricing model. He created the sharpe ratio for risk-adjusted investment performance analysis and contributed to the development of the binomial method for the evaluation of options. The gradient method focuses on asset allocation optimization, and returns-based style analysis for evaluating the style and performance of investment funds.

- Jan Mossin was a Norwegian economist born in Oslo. He graduated from the Norwegian School of Economics in 1959. After a couple years in business, he started his PhD studies in the spring semester of 1962 at Carnegie Mellon University. One of his doctoral dissertation was a very important contribution (1966) to the Capital Asset Pricing Model (CAPM).

- John lintner, Jr. was a professor at the Havard Business School in the 1960s and one of the co-creators of the Capital Asset Pricing Model (CAPM). Lintner was also known for a 1983 presentation he gave to the Financial Analysts Federation. For the first time he presented what has become known as the "Lintner paper" formally titled "the Potential Role of Managed Commodity- Financial Futures Accounts (And/or Funds) in portfolios of stocks and Bonds (Wikipedia, 2018).

3.2 The theory backgrounds

The theory inspired on the Markowitz model but lays emphasis on supplemented with additional assumptions. One of the difficulties with the Markowitz model is that it requires the estimation of variance-covariance matrix, which becomes very big if the number of available securities in the investor's investment horizon is high. He simplified the cumbersome estimation procedure by assuming that the returns of individual securities are only interrelated through their sensitivity to a common factor, specifically, the return of a broader market index. Sharpe further assumes that all investors are able to lend and borrow at the risk-free interest rate, that they agree on the shape of the efficient frontier, and that transaction costs are absent. Under these simplified assumptions, all investors will select a combination of the market portfolio and the risk-free asset (or borrow at the risk-free interest). All portfolios will lie on the "Capital Market line" and the slope of this line indicates the price of risk as determined by the market. Sharpe's "Capital Asset Pricing" Model became the blackbone of a lot of studies of pricing of assets in financial markets. The "betas" of the mode, which measure the sensitivity of the individual stock to movements in return on the stock market as a whole, became widely used by financial analysts and stock brokers (Morten Balling Ernest Gnan, 2013). The model assumes investors are risk averse and, when choosing among portfolios, they care only about the mean and variance of their one-period investment return. As a result, investors choose "mean- variance- efficiency portfolios in the sense that the portfolios minimize the variance of portfolio return, given expected return , and maximize

expected return, given variance. So, the Markowitz approach from which the CAPM is inspired is called a “meanvariance model” (Eugene F. Fama and Kenneth R. French, 2004).

3.3 Criticisms and limitations

The Capital Asset Pricing Theory has some limitations or criticisms that are relevant to be raised.

-First a serious weakness is that the market participants in the model are assumed to look only one period ahead in time. It uses a single risk factor and that this is not quite enough for describing the cross- section of expected returns in the financial market.

- With financial crisis that took place around the world, some researchers started arguing that Capital Asset Pricing Model and the theory of efficient market may need to be replaced with a paradigm of markets as vulnerable to capricious behaviour.

- For a time, much confusion was created due to the fact that various economists working on this model independently failed to realize that they were saying much the same thing. They looked at the issue of capital asset valuation from different perspectives. William F. Sharpe, for example, approached the problem as an individual investor picking stocks whereas Lintner approached it from the perspective of a corporation issuing shares of stock.

- In addition, it is viewed that the Capital Asset Pricing Model is attracted by the fact that it offers powerful and intuitively pleasing predictions about how to measure risk and the relation between expected return and risk. Unfortunately, the empirical record of the model is poor – poor enough to invalidate the way it is used in applications. The CAPM’s empirical problems may reflect theoretical failings, the result of many simplifying assumptions. But they may also be caused by difficulties in implementing valid tests of the model. For example, the CAPM underlines that the risk of a stock should be measured relative to a comprehensive “market portfolio” that in principle can include not just traded financial assets, but also consumer durables, real estate and human capital.

- In the end, we argue that whether the model’s problems reflect weaknesses in the theory or in its empirical implementation, the failure of the CAPM in empirical tests implies that most applications of the model are invalid. The model poses challenges to be explained by alternative models due to empirical work and finding shortcomings as well.

4. Interest Rate structure Theory

4.1 The theory profounder

Bond portfolios owners are exposed to many risks known as relevant types of risk such as interest rate risk, inflation risk, default or credit risk, currency risk and political risk. Furthermore, issuers of bonds are also exposed to most of these risks but the sign of the potential impact of risk events is normally the opposite. The interest rate structure at a given time reflects the overall evaluation by the market participants of all these risk factors.

Burton Gordon Malkiel is one of the two profounders of the interest rate structure theory highlighted since 1966. He is Professor in economics at Princeton University and famous for his classic finance book A random walk Down Wall Street. He has many other distinguished titles.

Angelo Melino is the other interest rate structure theory profounder based on his 1988 publication. He is Professor of economics at Toronto University. His research interests include financial-asset pricing and links between Finance and macroeconomics (Wikipedia, 2018).

4.2 Backgrounds of the theory

The term structure of interest rates is defined as the pattern of interest rates on bonds with different maturities at a given time. Central banks operate traditionally mainly in the market for short term instruments, while real economic activity is assumed via the investment behaviour of firms to be related to long-term interest rates. Therefore it also stands as a monetary policy perspective. This is prior to understand the factors which influence the relative yields on securities with different maturities. In line with the "Expectations Hypothesis Theory" forward interest rates are determined by the expectations of the market participants concerning the future development in short-term interest rates plus an appropriate risk premium. There has been disagreement on how to model expectations has been widespread. Some authors but not all have adopted the assumption of "Rational expectations" (Muth, 1961) whom work reveals that people make choices based on their rational outlook, available information and past experiences. The theory suggests that the current expectations in an economy are equivalent to what people think the future state of the economy will become. This contrasts with the idea that government policy influences people's decision (Investopedia, 2018).

In the absence of rational expectations, the expectations hypothesis implies that term premia are time invariant. When rational expectations are adopted, the implication is that the term premia are increasing with maturity.

4.3 Limitations or criticisms

They are other theories about the interest rate structure than the expectations theory and the theories based on arbitrage-free models. The "Liquidity Preference Theory" with backgrounds going back to Keynes and Hick[v], argues the maturity premium is determined by the maturity preferences of respectively investors and borrowers in the market. Investors have a preference for short term assets because of their high liquidity but they are ready to buy long-term bonds if they are compensated by a higher interest rate. In contrast, borrowers tend to prefer long-term debt and are ready to pay a higher interest rate in order to establish a more permanent debt structure. The interest rate structure observed in the market reflects the relative importance of the strength of these preferences among the two groups (idem).

Thus, the liquidity preference theory shows up other alternatives that investors express as far managing securities is concerned. Those preferences are not highlighted by the interest rate structure theory. This means that preference theory suggests that an investor demands a higher interest rate, or premium, on securities with long-term maturities, which carry greater risk, since all other factors being equal, investors prefer cash or other highly liquid holdings. Investments that are more liquid are easier to sell fast for full value. According to the liquidity theory, interest rate on short-term securities are lower because investors are sacrificing less liquid than they do by investing in medium-term or long-term securities. In addition, many studies of the term structure of interest rates have ignored credit risk. Many investors rely on credit ratings provided by rating agencies as Moody' Investor Service, Standard and Poor's or Fitch ratings. Bond issuers pay the agencies a fee for this service. Institutional investors subscribe to current information from the rating agencies. These credit rating agencies rate securities according to the performance of their companies. When difficulties appear from the issuers companies, the rating agencies will downgrade them and this may cause investors to sell their bonds. Some companies such as pension funds, insurance companies are instructed by their boards to invest in only high-rated bonds. These restrictions on portfolio leads to a situation known as "market segmentation effect" (idem).

5.Capital structure theory

In financial management, capital structure theory refers to a systematic approach to financing business activities through a combination of equities and liabilities. Competing capital structure theories explore the relationship between debt financing, equity financing and the market value of the firm.

The theory was founded by Modigliani and Miller two professors in the 1950s, who studied capital –structure theory intensively. From their analysis, they developed the capital – structure irrelevance proposition. Essentially, they hypothesized that in perfect markets, it does not matter what capital structure a company uses to finance its operations.

5.1 The theory profounder

- Franco Modigliani was an Italian-American economist and the recipient of the 1985 Nobel prize in Economics. He was a professor at UIUC, Carnegie Mellon University, and MIT. He died on September 25, 2003.

- Merton Miller was a free market economist of the Chicago school. His contributions to the theory of corporate finance brought him the Nobel Prize in 1990. Miller's work helped companies to make better decisions about borrowing to finance new projects. The so-called M and M theorem, first developed by Miller with fellow economist Franco Modigliani. Professor Merton Miller has died aged 77 (The telegraph, 2018).

5.2 Background of the theory

Both authors theorized that market value of a firm is determined by its earning power and the risk of its underlying assets, and that its value is independent of the way it chooses to finance its investments or distribute dividends. The basic M and M proposition is based on the following key assumptions:

-No taxes

-No transaction costs

No bankruptcy costs

-Equivalence in borrowing costs for both companies and investors

-Symmetry of market information, meaning companies and investors have the same information

-No effect of debt on a company's earnings before interest and taxes.

As we previously underlined both authors developed the capital-structure irrelevance proposition which is explained as follows:

The M and M capital-structure irrelevance proposition assumes no taxes and no bankruptcy costs. In the simplest view, the weighted average cost of capital (WACC) should remain

constant with changes in the company's capital structure. For example, no matter how the firm borrows, there will be changes in the company's capital structure. For example no matter how the firm borrows, there will be no tax benefit from interest payments and thus no changes or benefits to the WACC.

Additionally, since there are no changes or benefits from increases in debt, the capital structure does not influence a company's stock price, and the capital structure is therefore irrelevant to a company's stock price. However, as previously stated, taxes and

Bankruptcy costs do significant affect a company's stock price. In additional papers, Modigliani and Miller included both the effect of taxes and bankruptcy costs.

The theory recognizes the tax benefit from interest payments- that is, because interest paid on debt is tax deductible, issuing bonds effectively reduces a company's liability. Paying dividends on equity, however does not. The actual rate of interest companies pay on the bonds they issue is less than the nominal rate of interest because of the tax savings.

5.3 Criticisms or theory limitations

The irrelevance theorem of Modigliani and Miller has been criticized by another Nobel prize winner Joseph E. Stiglitz[vi] who highlighted that Modigliani and Miller assumed there was no default risk and that there were no information asymmetry problems between the investors and the company managers. These two assumptions are according to Stiglitz unrealistic and if they are removed, the capital structure becomes important. It becomes then possible to discuss a company's funding decisions and the interplay between shareholders, creditors and company managers and the implied corporate governance problems in a much more relevant manner.

Furthermore, Steward C. Meyers has written overview article on capital structure theories (Myers, 2001) where he highlights the "trade-off theory". The given theory says that firms seek debt levels that balance the tax advantages of additional debt against the costs of possible financial distress. "the pecking order theory" argues that firm will borrow, rather than issuing new equity, when internal cash flow is not sufficient to fund capital expenditures. Firms prefer internal to external finance in order not to be dependent on creditors or new shareholders. The "free cash flow theory" underlines the choice of capital structure stating that it is related to the conflicts between managers and shareholders. The owners might prefer higher dividend payments if the company has a good liquidity, but managers prefer to keep

the money in the company and invest in internal extension (Morten Balling, Ernest Gnan, 2013).

6. Agency theory

6.1 The theory profounders

They are two renowned authors namely Michael C. Jensen and William H. Meckling.

-Michael Cole Jensen is an American economist who works in the area of financial economics between 2000 and 2009. He worked for the Monitor Company Group, A strategy-consulting firm which became Monitor Deloitte in 2013. He holds the position of jesse Isidor Straus Professor of Business Administration, Emeritus, at Havard university. He is also a motivational speaker of leadership based on Ontological/Phenomenological pattern.

- William H. Meckling is an American economist and professor of Management and Government Policy and Dean at the Simon business School, University of Rochester, specialized in the domains of "managerial economics and the economic analysis of and his works received international recognition" (Wikipedia, 2018).

6.2 The theory background

The theory was elaborated by the two authors in 1976, They develop a theory of ownership structure for the firm. They analyse the implications of potential conflicts of interest between company's managers, shareholders, creditors and other company's shareholders.

Agency's relationship appear when persons (principals) engage other persons (agents) to perform some service on their behalf, which involves delegating some decision making authority to the agents. The contract between the parties will typically contain a set of incentives in order to limit divergences between their interests. Issues associated with the separation of ownership and control are intimately associated with agency problems.

Asymmetric of information is important for the distribution of power between mangers and shareholders, due to the fact that managers always know more about the company the external owners do, but asymmetric plays a larger role in financial markets. Asymmetry of information can be reduced not removed from the financial markets. Companies are requested to provide reliable information to the general public. That is why regulatory bodies call on rating agencies to examine the financial situations of every listed company in order to publish healthy information. Conflict of interest might occur between owners of a company and the credit rating agencies. The owner or manager of a credit rating agency may find himself being a board member of a company or the company's agent. This

implies the agency problem specifically the impartiality problem that needs to be addressed adequately.

6.3 The theory criticisms

As previously highlighted, agency theory is an approach that involves the application of game theory to the analysis of a particular class of interactions that is a situation in which one individual (the agent) Acts on behalf of another (the principal) and is supposed to attain the principal's goals . In the wake of analysis the agency theory some appearing criticisms merit to be pointed out.

-Ethicists often complain that agency theorists, by adopting an economic pattern of action, thereby assume that rational individuals are self-interested, or that they act from egoistic and not altruistic motives.

-Agency theory has been dominating corporate governance literature, it is however claimed to provide very little information regarding actual board functioning and behaviour and hence a need for greater theoretical pluralism and more detailed attention to board processes and dynamics (International journal of economics and Financial issues, 2016).

- A critical agency perspective is also able to explain quite clearly why, as production becomes more kwowlegde-intensive, there is a need to shift away from Taylorian management system strategic, in favour of a focus upon organization culture, team-building and "shared values". It is because agency

-A critical agency perspective is also able to explain quite clearly why, as production becomes more knowledge-intensive, there is a need to shift away from more Taylorian management strategies, in favour of a focus upon organizational culture, team-building and "shared values." It is because agency problems are caused, fundamentally, by information asymmetries (Joseph Heath, 2015).

7. Efficient market theory

Technically, the theory is also known as Efficient Market Hypothesis.

7.1The theory profounders

-Sidney Stuart Alexander was an American economist who was associated with the Massasuchetts Institute of Technology. During world war II he served as a Director of Research in the Office of Strategy Services (OSS). From 1956 until his retirement Professor Alexander taught at MIT, in both the MIT sloan School of Management and the Economics Department.

- Eugene fama has written a famous survey article on tests for market efficiency in 1970. He is an American economist best known for his empirical work on portfolio theory, asset pricing and the 'Efficient Market hypothesis'. He is currently Robert R. McCormick Distinguished

Service Professor of Finance at the University of Chicago Booth School of Business. In 2013, he shared the Nobel Memorial Prize in Economic Sciences jointly with Robert Shiller and Lars Peter Hansen. The Research Paper in Economics project ranked him as the seventh-most influential economist of all-time based on his academic contributions (Wikipedia, 2018) .

7.2 The theory backgrounds

The efficient market theory states the prices of securities in financial markets reflect all information, which is available to the investors. According to the theory profounder Sidney Alexander market efficiency can be tested in different ways. A test for “weak-form efficiency” uses only past price data in order to predict futures prices of the financial asset in question. In a test for “semi-strong-form efficiency”, the information set is expanded to include only past price data but all publicly available information. Finally, a test for “strong-form efficiency” includes not only publicly available information but also insider information, which can be possessed by company managers, employees, bankers and auditors. The theory implies that the use of technical analysis to predict future stock prices is waste of time. It is important in the context of disclosure requirements for listed companies and rules concerning insider trading. The Efficient Market theory assumes that investors are rational. This implies they currently follow the flow of information, which is relevant to the pricing of securities they hold. By they currently adjust the composition of the portfolio when new critical information is disclosed. It is also important to evaluate the realism of the Efficient Market Theory in the light of transaction costs. If rational investors decide to adjust their portfolios because new information has affected their expectations, they must pay fees to their bank or stock broker, bid-ask spreads and other transactions costs. The existence of these costs may cause some inertia in the portfolio composition and delay market reactions to new information (Morten Balling, Ernest Gnan, 2013). Efficient Market Theory is important in the context of investment advice and portfolio management as well.

7.3 The theory criticisms or limitations

Some criticisms arise in the light of the Efficient Market Theory.

- It is not easy for assets portfolios holders or investors to define what relevant information is.

- day, investors and their advisors are confronted with an enormous amount of new information, which may or may not have an influence on the pricing of the financial assets they own to have the opportunity to purchase.

- Market reactions delay stands as the result of investors behaviour not to react due to gathered additional information requesting to pay transactions cost to bank or stock brokers for eventual advice or recommendations that required reactions or acting on the ground.

- Empirical evidence has been mixed, but has generally not supported strong forms of the Market Hypothesis.

- bias has been noticed all around financial markets as a type of cognitive bias, and involves distorted evaluation. Information bias occurs due to people's curiosity and confusion of goals when trying to choose a course of action.

- speculative economic bubbles are an obvious anomaly in that the market often appears to be driven by buyers operating on irrational exuberance, who take little notice of underlying value.

- Any anomalies pertaining to market inefficiencies are the result of a cost benefit analysis made by those willing to incur the cost of acquiring the valuable information in order to trade on it.

- The financial crisis of 2007- 2012 has led to renewed scrutiny and criticism of the hypothesis, claiming that belief in the hypothesis caused financial leaders to adopt a "chronic underestimation of the dangers of asset bubbles breaking"(Wikipedia, 2018).

8.Option pricing theory

8.1 The theory profounder

The theory has laid the foundation of a phenomenal growth in derivatives markets in several decades. The theory profounders are Fischer Black and Myron S. Scholes who published a related article in 1973.

-Fischer Black is an American economist, best known as one of the authors of the famous Black scholes equation.

- Myron S. Scholes is a Canadian-American financial economist. He is the Frank E. Buck Professor of Finance, Emeritus at the Stanford Graduate School of Business, Nobel Laureate in Economic Science, and co-originator of the Black-Scholes options pricing model.

8.2 The theory backgrounds

The so called “black Formula” determines the value of a European call option as a function of the exercise price, the market price of the underlying asset, the time distance to exercise, the risk-free interest rate and the volatility of the underlying asset. The formula is based on the assumption that investors are able continually to correct the portfolios. Since investors cannot do that in practice, the formula is an approximation. The formula has proved to be highly useable in the real world. It is today applied on all markets for derivatives in the world. Information in annual reports from listed companies on the value of stock options awarded to members of the company management is in most cases based on the Black- Scholes Formula (Morten Balling, Ernest Gnan, 2013).

The formula also called Black-Scholes-Merton was the first widely used model for option pricing. It is used to calculate the theoretical value of European-style options using current stock prices, expected dividends, the option’s strike price, expected interest rates, time to expiration and expected volatility (Investopedia, 2018). The Black Sholes call option formula is calculated by multiplying the stock price by the cumulative standard normal probability distribution function. Afterwards, the net present value (NPV) of the strike price multiplied by the cumulative standard normal distribution is subtracted from the resulting value of the previous calculation. In mathematical notation, C= SxN(d1)-Ke^(-rxT)xN(d2).Conversely the value of a put option could be calculated using the formula: P= ke^(-rxT)xN(-d2) – SxN(-d1). In both formulas, S is the stock price, K is the strike price, r is the risk-free interest rate and T is the time to maturity.

The main advantage of the Black-Scholes model is speed – it lets you calculate a very large number of option prices in a very short time.

8.3 The theory limitations

As stated previously, the Black Scholes model is only used to price European options and does not take into account that American options could be exercised before the expiration date. Moreover, the model assumes dividends and risk-free rates are constant, but this may not be true indeed. The model also assumes volatility remains constant over the option’s life, which is not the case because volatility varies with the level of supply and demand (Investopedia, 2018).

After describing the various financial theories required for financial markets development, we thereafter underline the various challenges that these financial markets have been going

through before highlighting the related perspectives and adequate recommendations that address the finding challenges.

7: FINANCIAL MARKETS CHALLENGES

Financial markets have grown rapidly over the past few decades boosted globalization and the revolution of information technology. This growth has been accompanied by increased concentration, with economies of scale, lower costs and greater efficiency, creating larger

clusters and financial centres around the world. But somewhere along the way the connection between financial markets and society has been lost so rebuilding and reshaping trust in banking and finance industries and dealing with the Uk's exit from the European union will be the main challenges for the industry for many years to come (Jon Cunliffe, 2016).

Thus, laying emphasis on financial markets challenges is synonymous to discuss the related hurdles or pitfalls that financial markets are facing throughout the functioning on the one hand and raising some relevant debates that are inherent to the financial markets development and wellbeing as well on the other hand.

1.Challenges related to financial markets

These challenges can be broken into two parts known as internal and external ones.

1.1internal challenges related to financial markets

They stand as hurdles that impede financial markets functioning on regular basis.

1.1.1Asymmetric information between savers and users

Asymmetric information also known as information failure occurs when one party to an economic transaction possesses greater material knowledge than the other party. This is normally manifests when the seller of a good or service has greater knowledge than the buyer although the reverse is possible. Almost all economic transactions involve information asymmetries (Investopedia, 2018).

Likewise, asymmetric information is lack of information contents between parties to a common issue that affects each other's interests constitutes an informational asymmetry. A generalization of this concept would also include unequal capacities among parties to a common issue to process a given set of information (P.k. RAO, 2003). This challenge is rampant in financial markets between savers and borrowers in particular as in business industry as a whole.

1.1.2 Insider information

Insider information is a non –public fact regarding the plans or condition of a publicly traded company that could provide a financial advantage when used to buy or sell shares of that or another company's securities. Knowing about a company's significant confidential corporate developments, such as the release of a new product, could provide an unfair advantage if the information is not public, that is, if only a few people know about the developments. Insider information is typically gained by someone who is working within or close to a listed company (Investopedia, 2018).This practice is frequent within financial markets. Its disappearance within financial transactions will stand as a great step towards financial markets development.

1.1.3 Gaining the general public trust

In this issue, financial markets are requested to gain economic agents trust by attracting them to mostly be involved in financial transactions such as committing their savings for acquiring available financial securities. This was particularly requested after the subprime crisis in 2008 where investors trust has been lost against the efficiency of financial markets particularly from one of its stakeholders known as credit ratings whose predictions were not about to allow the financial industry to avoid bankruptcy. Likewise, the same confidence and trust are still requested from economic agents against financial markets related to the Brexit issue as underlined by Jon Cunliffe[vii] within his speech in front of the European financial markets association.

1.1.4 Resilience and regulation

Restoring public support requires authorities and the financial sector to demonstrate that the risks that are posed by large, very complex and highly interconnected financial markets can be effectively managed and mitigated (Jon Cunliffe, 2016). Financial markets are required to innovate and change at speed. New products and ways of working can become significant very quickly. And sectors that have not generates risk in the past can change their profile quickly. So efficient management is mostly awaited as far as managing financial markets is concerned.

Recent crisis that occurred in the financial system serious dampen financial markets functioning worldwide. The subprime financial crisis that took place in 2007 affected financial markets in the extent investors made poor decisions that do not protect them from the financial crisis. The market-disciplined approach put in place by the second Bush administration was not efficient to prevent such crisis and protect financial markets against instabilities. Furthermore as we previously highlighted, rating agencies purport to assess an investment's safety, but they failed to anticipate the defaults. (Stephen L. Schwarcz, 2008). The complexity of financial transaction that took place within the mortgage market was not understood by the investors consequently inadequate decisions were made that led to greater losses and meltdown effects as well.

All these anomalies call on financial markets stakeholders to seek for ways and means that enhance them to act properly and rightfully in order to prevent future distortions.

1.1.5 Lack of adequate and efficient market infrastructure

Financial markets also face the difficulties to dispose market infrastructure that enhance issuing, trading and settlements and the potential for increased volatility due to liquidity, interest rate and rollover risks. These realities are mostly the case of developing countries where there is a strong lack of financial sector depth.

We have underlined some of the relevant challenges that financial markets face. We do not pretend to having provided the exhausted list. But it is also critical to highlight other challenges sided at the other way round.

2. Financial markets external challenges

Other challenges affect financial markets throughout their functioning. Overcoming these challenges stand as a bold step towards financial markets development and deepening

2.1 Financial markets contribution to the development process

Contributing to the development process stands as a very challenge task for financial markets. Economic growth and development is an aspiration: it is a mechanism to alleviate poverty, to give opportunity to those who do not yet have it, to foster equality, and to create a better society. Well-functioning exchanges enable economic growth and development by facilitating the mobilization of financial resources- by bringing together those who need capital to innovate and grow, with those who have resources to invest. This is performed within an environment that is regulated, secure, transparent and equitable. Exchanges also seek to promote good corporate governance amongst their listed issuers, encouraging transparency, accountability and respect for the rights of shareholders and key stakeholders. There is an increase of number of countries with a stock exchange from just over 50 in 1975 to over 160 in 2015[2]. This increase is partly attributable to a growing consensus about the role of stock exchanges in promoting economic development. However, despite this growth in the number of exchanges, the link between exchanges and economic development is not widely-understood or appreciated. There are several reasons why this might be the case. Firstly, there is insufficient understanding outside the financial sector and certain policy and academic arenas, of what exchanges do, and how what they do contributes to positive economic and societal outcomes. Second, while the academic literature is in agreement that there is a positive link between well-functioning financial markets and economic development, there is no blueprint to guide practitioners as to what combination of policies, incentives and structures is required to produce a 'well-functioning market'. Given the potential of

[2] These figures were published by the joint report written by the World Federation of Exchanges and the United Nations Conference on Trade and Development.

exchanges in contributing to economic development, it is important to not only improve the understanding of the role of exchanges and how they operate, but to work towards the creation of environments that ensure the development of well-functioning exchanges . So a critical step is being established between the World Federation of Exchanges (WFE) and the United Nations Conference on Trade and Development (United Nations Conference on Trade and Development) in achieving this objective (World Federation of Exchanges, United Nations Conference on Trade and Development, 2016).

2.2 Financial markets contribution to GDP

Financial markets strongly contribute the country's Gross Domestic Product. The stock market affects gross Domestic Product (GDP) primarily by influencing financial conditions and consumer confidence. When stocks are in bull market, there tends to be great deal of optimism surrounding the economy and the prospects of various stocks. High valuations allow companies to borrow more money at cheaper rates, allowing them to expand operations, invest in new projects, and hire more workers. All of these boost GDP. In the economy, consumers are likely to spend money and make major purchases, such as houses or automobiles. With stock prices in bull mode; they have more wealth and optimism about future prospects. This confidence spills over into increased spending, which leads to increased sales and earnings for corporations, further boosting GDP (Mary Hall, 2018).

2.3 Financial markets services expansion

Financial markets have another critical challenge to expand its services and products especially to financial system excluded economic agents who are those economic stakeholders that are not involved in the financial markets services outreach. In the view to promoting financial inclusion financial markets are called to contribute to the attainment of reaching out its services and products to those who are either not aware or not interested. This objective attainment passes through the promotion of financial education to the general public. Thus international financial institutions such as IMF and the World Bank and other entities are closely working in this extent. In this respect, financial literacy and capability will progress and enhance financial markets instruments and services expansion (Investopedia, 2018).

In this chapter, we have been discussing the various challenges that face financial markets throughout their functioning and search for a critical development. Some insightful discussions are required to deepen the understanding about the key factors that enhance financial markets development as well as ensuring their survival. This attempt allows us to raise a critical question that stands as a prominent debate raised in the international financial encounters such as fora, conferences, annual meetings, and symposiums.

3.Building financial markets resilience: the debate

Financial resilience describes the ability of an entity to remain viable, stable and effective in the medium to long term in the face of pressures from growing demand, tightening funding and an increasingly complex and unpredictable financial environment (The Chartered Institute of public finance and accountancy,2013). For financial markets to build resilience as a whole and those based in Africa in particular, there are certain policies that are critically needed on the ground. For financial markets to stand resilient in Africa some resources, modalities and adaptabilities are required such as financial strength, institutional flexibility and regulatory action and supervisory foresight.

3.1 Financial markets growth

In Africa financial markets look very small. It is critical to make them grow consistently in order to increase their financial transactions and attract more economic agents within their daily activities. This required growth in financial markets in Africa calls on to put in place sound financial institutions.

3.2 Sound financial institutions

They are required in the African financial system in the view of promoting transparency, efficiency in terms of management and forecasting. Sound financial institutions is all about promoting consistency, impartiality and literacy.

- Consistency is all setting up a task force identifying areas of inconsistency, and suggesting approaches to remove those inconsistencies within financial markets in Africa.
- Impartiality is to think about an institutional setup for the integration of supervisory tasks in institutions with a sufficient wide in terms of relevant market, mandate.
- Literacy here calls on the initiative to provide financial education to the general public and introducing insights of resilience to secondary school curriculum so that early involvement in terms financial resilience should be shared all along (Frankly Allen, Jan Pieter Krahnen, Helene Ray, 2017). African financial markets are needed to be flexible that is to adapt in addressing the various shortcomings that appear in their daily activities.

3.3 The attraction of long -term capital flows

This requirement is very critical as far financial markets resilience is being promoted across the african continent. Long-term capital flows are requested within Africa financial markets in order to enhance financial stability of financial institutions and ensure financial transactions occurrence. Furthermore, this long term capital flows stands as a means to pooling reserves that play a key role in terms currency volatility. Especially long-term international capital flows are very essential to support African banks as a critical stakeholder in financial markets.

3.4 Risk management

Since African financial markets are not connect to international financial markets the trend of financial markets stakeholders in Africa is risk avoidance. But resilience in african financial markets stand consistent and effective there is a serious trend to manage risks instead of avoiding them. Since their effects are extensive while avoiding them. The good behaviour stands in the point that when facing any risks in financial markets transactions it is better to find ways to manage it that is to turn the risk appearing threats to new opportunities to act and gain some available credentials all along the way (idem). Risk management in financial markets also relies on the benefits that technology advancement also provides within the globalization framework.

3.5 Regulation in African financial markets

In order to build resilience in african financial markets, regulation stands as the pillar of resilience building. Since the main challenges for regulators has been to keep up with and adapt to these changes which are often of an international nature such as the subprime crisis form mortgage market in the United States of America in 2007, the Brexit that currently took place in the European Union, the Madoff scandal, etc… thus regulation as a whole has three main objectives.

- The protection of investors
- Ensuring that markets are fair, efficient and transparent
- The reduction of systemic risk

In some extents these three objectives are related so building African financial markets resilience is synonymous of seeking to applying these guidelines (South Africa Financial markets Bill, 2011). Building financial markets resilience in Africa stands as a critical task towards financial sector development in Africa. As far as we underlined the various challenges that financial markets face as a whole, it is very relevant to pursuing the writing of this essay by discussing the various prospects and recommendations that are key to financial markets development as a whole and also the betterment of those Africa-based financial markets in particular.

CHAPTER 8: FUTURE PROSPECTS AND RECOMMENDATIONS RELATED TO FINANCIAL MARKETS

In this chapter, we will discuss about the various prospects and recommendations that are in line with what financial markets face. The prospects point out the given opportunities and domains where financial markets actions are expected to make things move forward. Likewise, recommendations are those proposals that help to sort out the various pitfalls and shortcomings that financial markets meet. In terms of prospects, there is a variety of findings that merit to be discussed as far as financial markets functioning is concerned. We divide these outlooks into two categories known as internal prospects and external outlooks related to financial markets.

1. Financial markets internal prospects

1.1 The technological change in financial markets

Technological change has vastly lowered information-handling and other transaction costs, creating the foundation for enormous and fundamental changes in the structure and functioning of financial

markets as substantial new opportunities are opened up and exploited. To some degree, new development has supported further consolidation and centralization of financial markets. The growing importance of global financial trading centres, along with increased use of the internet and other electronic trading platforms, portend heightened competition for "national" financial markets, which raises concerns about their long-run viability. It appears that the one certainty is that, as we move into the future, financial markets will resemble those in the past less and less due to advancements of technological change. These technological improvements have provided direct effects such as economies of scales as a means of spreading the high set-up costs of new technological infrastructure over a larger customer base, thereby lowering unit cost. Technological advance is also source of feasibility of remote processing, enhances payments processing and settlements alternatives (Charles Gaa, Stephen Lumpkin, Robert Ogrodnik, and Peter Thurlow, 2001). Likewise the rapid pace of advances in computer and communications technological has a dramatic effects on financial markets. The possible implications of electronic trading are important and far-reaching.

1.2 Financial markets good governance

The world of finance has undergone an upheaval since 2008 – 9 with the onset of the global financial crisis that has largely afflicted the major western economies. These economies have developed structures of financial supervision and implementation leading standards in financial regulation. Thus, financial markets internal outlook also stands at the level of seeking and promoting good governance throughout its functioning in the aim of enhancing its development and tacking various shortcomings that are being faced on regular basis. So the crisis has deeply questioned the financial markets' ability to address severe externalities as state bailouts have become the norm for failed banks. Financial stability is required to dominate post-crisis financial regulation rhetoric. So, regulation as practice of good governance is has the purpose of maintaining financial stability in the aim of curbing irregularities such as information asymmetry in securities and investment markets, the agency problem between investment intermediaries and clients. All these pitfalls stand as market failures that need to be address through regulation, good governance and transparency in financial transactions occurrence. As an internal prospect in financial markets, good governance performed through financial regulation implies a number of objectives such as transactional protection for participants in financial markets, maintenance of the overall health, robustness and integrity of financial systems and supranational objectives, such as market and legal integration in a given world region (Mads Andenas,Iris H-Y Chiu, 2014).

1.3 Risk mitigation in financial markets

Risk mitigation in financial markets also stands as a critical point as far as regulating and promoting financial markets good governance. Hereby we have chosen to discuss them separately due to their relevant aspects and pertinence as far financial markets functioning is concerned. Mainly, it is all about market risk and systemic risk.

1.3.1 Market risk

Market risk is defined as the possibility of financial loss as a result of fluctuations in the market value of assets. Market risk comprises interest rate risk, exchange rate risk, and price fluctuation risk on equities and commodities. It also refers to potential loss as a result of influence from other risk factors, such as volatility and correlation (The Financial Supervision Authority, 2008).

1.3.2 Systemic risk

It is the risk of collapse of an entire financial system or entire market, as opposed to risk associated with any one individual entity group or component of a system, that can be contained therein without harming the entire system. It can be defined as financial system instability that must be mitigated and dampened by regulators (Wikipedia, 2018).

1.3.3 Market risk strategy

The market risk strategy represents the supervised entity's long term risk taking level, reflecting the Board of Directors' decision on their appetite for market risk under the current companies' business plan. The market risk strategy must contain clear guidelines for the different lines of business subject to market risk, including their levels of acceptance market risk.

Apart from internal prospects related to financial markets, we move on examining the external prospects related to these very financial markets (The Financial Supervision Authority, 2008).

2. Financial markets external prospects

In terms of external prospects, financial markets have so many significant outlooks to explore. They can be discussed as follows.

2.1 Alliances among financial stock exchanges

The trend towards alliances among exchanges is well underway and is certain to continue. The purpose is to provide firms that do business on a worldwide basis the opportunity to be listed on exchanges around the world. Just as many currencies are traded 24 hours per day, investors around the globe will have the opportunity to trade the stocks of international companies after home the exchange of the company has close. This prospect for financial markets stands very significant and need to be deepened in business perspectives. There appear to be four different strategies for linking exchanges. The first is being developed by NASDAQ in creating markets in various countries with local partners using a common technology for example NASDAQ Japan, NASDAQ Europe and NASDAQ Canada. The second strategy is that of merger as with the proposed union, of the London and Frankfurt stock exchanges. The third strategy is that of a hostile takeover bid, as was attempted by OM Gruppen of Sweden for the London Stock Exchange. The fourth strategy is being pursued by the NYSE in its creation of the Global Equity Market(GEM), which includes 10 other member exchanges. The existing local exchanges would retain their identities but would share a common electronic interface. They could combine their order flows from the largest companies (Charles Gaa, Stephen Lumpkin, Robert Ogrodnik, and Peter Thurlow, 2001).

2.2 Financial markets as a tool for financing the SDGs

In the aim of attaining or fulfilling the Sustainable Development Goals, funding is a critical tool that critically enhances the various commitment on the grounds.

So, the United Nations is focused to put in place a financing focusing on how to drive that transformation to align financial markets with sustainable development as well as showcasting concrete way in which Member States can approach the financing of different SDGs (United Nations, 2017).

2.3 Financial markets stepping into globalization

As part the development process stakeholders, financial markets play a key role in globalization process by rising cross- border capital flows through the reduction of market segmentation and seeking ways to promote stock exchanges alliances as previously highlighted. The process of globalization allow large corporations with global orientations to have access to pools of capital internationally. Globalization could allow financial markets to fulfill international requirements and standards. In taking part into globalization, financial markets innovate by increasing financial mediation. Globalization of financial markets has created a highly fluid medium through which political and economic shocks in one area are quickly and forcefully transmitted to the rest of the globe.

After having discussed the various prospects that stand very critical for the future and development of financial markets, it is very relevant to provide some recommendations that are related to the various pitfalls and shortcoming that are threatening financial markets development on regular basis (Charles Gaa, Stephen Lumpkin, Robert Ogrodnik, and Peter Thurlow, 2001).

3.Recommendations related to financial markets

In this section, we will discuss about the recommendations that are sound for financial markets not only development but also their future. These recommendations are stated and examined as follows. The future of financial markets has been designed by the Financial Markets Authority[3] of a given country and association aiming on rebuilding market and investor's confidence following the global financial crisis, and the failure of finance companies.

1. Better investor information

Comprehensive information on world financial markets should be available to all potential investors in financial markets. This availability should not be affected neither by conflict of interest, asymmetric

[3] Financial Markets Authorities here refers to empirical purpose of New Zealand case. That is an example considered to due literature review availability. The purpose of this financial markets regulator is critical and considerable for financial markets development as a whole. The New Zealand Financial Authority was established on 1 May 2011. It stands as the new consolidated market conduct regulator for New Zealand's financial markets. The Financial Market Authority act 2011 establishes FMA as an independent Crown Entity and sets out its functions. As mentioned above, FMA's main objective is 'to promote and facilitate the development of fair, efficient, and transparent financial markets'.

information, insider offence and other information irregularities so that all investors should be put at the very consideration.

2. New licensing and governance rules for issuers

Licenses should be issued to accredited brokers or intermediaries so that they can legally act on behalf of investors in a legal and appropriate way. Likewise, financial markets issuers must abide by the rules put in place. Issuers should be backed or advised by investment banks in the process of issuing bonds certificates be it a market-based or instruments- based financial system. Regulation is most required to make sure that the investors' rights are protected and that issuers follow the required for raising funding through bonds issuance certificate.

3. New mechanisms to enable raising capital

In this extent, financial engineering is called to design financial mechanisms to enable raising capital. It could be putting in place sound incentives to attract savers to acquire securities in financial markets. These incentives could be the rewarding interest rate or financial return that a saver could earn in the process of acquiring securities in financial markets bonds or stocks. Issuers or investors are also concerned in presenting good signs for the financial health for attracting more securities buyers. Thus these recommendations aim to promote and facilitate the development of fair, efficient and transparent financial markets and promote the confident and informed participation of businesses, investors, and consumers in the financial markets (Financial Markets Authority, 2013).

After examining the overall question of financial markets in various points, we will now move on to the concluding part.

CONCLUSION

The essay entitled financial markets has been examined in depth for the academic purpose for the reward of the PhD degree in Financial Engineering including Developmental Finance, Risk Assessments, and Financial Analysis. Studying financial markets has led us to design chapters in the aim of exhaustively study the relevant points and issues. Chapter 1 focuses to provide the insight on what financial markets are all about. So tackling the point leads us to define what financial markets are, their role within the economy and their contribution. Chapter 2 analyses the structure of financial markets in the angle of explaining its various types, and size or scope of financial markets within the economy. Chapter 3 presents the various instruments used in the financial markets and explains their related features. Furthermore, uses of financial instruments are also taken into account as well as types of instruments used in financial markets. The next chapter 4 financial markets stakeholders highlights the various financial markets participants such as investors: individual investors, institutional investors, mutual funds, hedge funds, insurance companies, other institutions, etc… Likewise, other participants are also underlined in this extent that is professionals taking part in financial markets functioning namely brokerages, regulators such as regulatory bodies, the central bank. The process of introducing a company or entity in financial markets has also been presented through the case of New

York Stock Exchange. The link between financial market and development has also been examined through bringing out the importance of capital accumulation, capital markets raison d'être, development incentives brought by financial markets development, the importance of financial market in the economic growth. Regulatory and supervisory bodies in the economic development process were also examined in chapter 5 without putting aside the relevance of local capital markets for financing development. We pursue our reflections in chapter 6 by bringing in the various relationships between the financial theory and financial markets. The financial theory points out a milestone of financial theories related to financial markets functioning and development purpose. These related financial theories are known as portfolio theory, Capital Asset Pricing Theory, Interest Rate Structure theory, Capital structure theory, Agency theory, Efficient market theory, option pricing theory. In addition, chapter 7 underlines the challenges related to financial markets in the internal and external extents, resilience and regulation purposes also stand as critical pillars of financial markets functioning and development. Chapter 8 views the importance of setting up the prospects and recommendations related to financial markets future. In the overall understanding, financial markets are considered as critical instruments in the contribution for economic development, financial inclusion and stands as an economic attractor of foreign direct investments needed to attain the 2030 Sustainable Development Goals agenda and enhance a country's economic competitiveness. The point nowadays mostly stands in the developing world where financial markets development is lacking and its benefits towards these developing countries are still awaited for their economic prosperity.

APPENDIX

1. Financing on international capital markets

Type of instrument, USD bn

	2000	2004	2008	2012
Bonds and money- market instruments	1,241	1,621	2,416	705
Equities	3,17	214	392	630
Syndicated loans	1,485	1,807	1,682	1,841
TOTAL	3,043	3,642	4,490	3,176

Source: Bank for International settlements – (Marc Levinson, 2014)

2. FINANCIAL ASSETS OF INSTITUTIONAL INVESTORS, 2011

AUSTRALIA	255	1,336
CANADA	768	1,572
FRANCE	1,513	2,381

GERMANY	1,567	2,381
ITALY	205	707
JAPAN	3,745	6,058
MEXICO[2]	93	144
NERTHERLANDS	475	1,634
SWEDEN	238	513
SWITZERLAND	475	1,154
TURKEY	161	143
UK	1,065	4,288
US	11,927	17,172

[2] 2010

Source: OECD, Average exchange rates from US internal revenue Service – (idem)

ABBREVIATION AND GLOSSARY

CAPM: Capital Asset Pricing Model
CAPT: Capital Asset Pricing Theory
FED: Federal Reserve System

FMA: Financial Markets Authority

IFC: International Financial Corporation

GDP: Gross Domestic Product

MIT: Massachussets Institute of Technology

MPT: Modern Portfolio Theory

SEC: Securities Exchange Commission

UIUC: UNIVERSITY of Illinois Urbana-Champaign

UNCTAD: United Nations Conference on Trade and Development

UCSD: University of California San Diego

STANCO: Tired

WFE: World Federation of Exchanges

Asset: Something valuable that an entity owns, benefits from or has use of, in generating income. Something that an entity has acquired or purchased and that has money value(its cost, book value, market value, or residual value.

Commodity derivative: Financial instrument the value of which depend on that of a commodity, such as grains, energy or metals. The use of commodity derivatives is widespread across industries and types of counterparties, notably non-financials.

Corporate bond: it is a bond issued by a corporation in order to raise financing for a variety of reasons such as to ongoing operations in order to expand business. Debt Corporate instruments with maturity shorter than one year are referred to as commercial paper.

Currency: is a general accepted form of money, including coins and paper notes, which is issued by a government and circulated within an economy.

Debt financing: It is a method of financing in which a company receives a loan and gives its promise to repay the loan

Equity: the value of an asset less the value of all liabilities on that asset

Equity financing: is the process of raising capital through the sale of shares in an enterprise. Equity financing essentially refers to the sale of an ownership interest to raise funds for business purposes.

Free Cash flow theory: it underlines the cash that a company is able to generate after required investment to maintain or expand its assets base. The theory highlights the measurement of a company's financial performance and health.

Insider offence: is a non-public fact regarding the plans or condition of a publicly traded company that could provide a financial advantage when used to buy or sell shares of that or another company's securities. Knowing about a company's significant, confidential corporate developments, such as the release of a new product, could provide an unfair advantage if the information is not public, that is, if only a few people about the developments. Insider information is typically gained by someone who is working within or close to a listed company. So insider offence is conducted through the use of insider information that is a non-public fact regarding the plans or conditions of a publicly traded company that could provide a financial advantage in securities market.

Investor: is any person who commits capital with the expectation of financial returns. Investors utilize investments in order to grow their money and/or provide an income during retirement, such as with an annuity.

Market value: is the price an asset would get in the marketplace. Market value also refers to the market capitalization of a publicly-traded company.

Maturity Premium: an extra return that compensates investors for the increased sensitivity of the market value of a debt to a change in market interest rate as maturity is extented

Municipal bond : also known as mini bond. It is a bond issued by local government or territory or one of their agencies. It is generally used to finance public projects such as roads, schools, airports, seaports and infrastructure-related repairs.

Pecking order theory: In corporate finance the pecking order theory postulates that costs of financing increases with asymmetric information. Financing comes from three sources: internal funds, debtn and new equity.

Note: record, account, notation, entry, inscription

Market segmentation effect: benefits or advantages derived from segmenting or dividing a market into several groups. Mostly, the purpose is to reach and meet the target needs and master the significant insights of the given market.

Personal property: personal property is generally considered property that is movable, as opposed to real property or real estate. In common law systems, personal property may also be called chattels or personality. In civil law systems, personal property is often called movable property or movables – any property that can be moved from one location to another.

Real estate:"property consisting of land and the buildings on it, along with its natural resources such as crops, minerals or water, immovable property of this nature; an interest vested in this (also) an item of real property (more generally) buildings or housing in general. It is a legal term used in jurisdictions whose legal system is derived from English common law, such as India, the United Kingdom, United States, Canada, Pakistan, Australia and New Zealand.

Trade-off theory of capital structure: is the idea that a company chooses how much debt finance and how much equity finance to use by balancing the costs and benefits.

Treasury bond: a marketable fixed interest government debt security with a maturity of more than 10 years. Treasury bonds make interest payments semi-annually. The income received is only taxed by the government. Treasury bonds are also known in the market as primary risk- free. They are issued by the government with very little risk of default.

Term Premium: the amount by which the yield-to-maturity of a long-term bond exceeds that of a short-term bond because one collects coupons on a long-term bond for a longer period of time, its yield-to-maturity will be more. The amount of a term premium depends on the interest rates of the individual bonds.

Yield-to-maturity: total return anticipated on a bond if the bond if the bond is held until it matures. Yield to maturity is considered a long- term bond yield, but is expressed as an annual rate.

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www.wikipedia.org

http://www2.econ.iastate.edu/tesfatsi

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www.issu.com

www.africadigitallibrary.org

Useful webcasts

- What are financial markets?
- How resilient should financial markets be?
- Developing capital markets in Africa
- World Economic Forum Africa 2016 – Building Financial markets resilience
- Financial markets – Georges Soros

Notes

[i] This figure is published in 2011 by the bank of International Settlements; World Federation of Exchanges; Thomson Reuters.

[ii] These figures on various financial markets are derived from the study performed by Anjan Thakor in his publication entitled International Financial markets: A diverse system is the key to commerce. This work has been published through centre for capital markets- competitiveness.

[iii] This figure is part of Anja Thakor publications derived in the centre for capital markets- competitiveness.

[iv] Efficient Frontier. The hyperbola is sometimes referred to as the 'Markowitz Bullet', and is the efficient frontier if no risk-free asset is available. With a risk-free asset, the straight line is the efficient frontier

[v] These authors are very prominent in the area o economics. John Maynard Keynes is World-renowned economist who first introduced the liquidity preference theory in chapter 13 of his book The General theory of Employment, Interest and Money. According to Keynes, individuals value money for “the transaction of current business and its use as a store of wealth.” Meanwhile, John Richards Hicks was a British economist considered as the most important and influential economists of the twentieth century. The most familiar of his many contributions in the field of economics were his statement of consumer demand theory in microeconomics, and the IS/LM model (1937), which summarized a keynesian wiew of macroeconomics.

vi Joseph Eugene. Stiglitz is an american economist and Professor at Columbia University. He is recipient of the Nobel Memorial Prize in Economic Sciences in 2001 and the John Bates Clark Medal in 1997. He is a former Senior Vice president and Chief Economist of the World Bank and he is a former member and chairman of the (US president’s) council of Economic Advisers. He is known for his support of Georgist public finance theory and for his critical view of the management of globalization, of lasses-faire economists (whom ha calls” free market fundamentalists”) and of international institutions such as the International Monetary Fund and the World Bank(Wikipedia, 2018).

vii Jon Cunliffe is Deputy Governor, Financial stability member of the Monetary Policy committee, member of the financial policy committee and member of the prudential regulation Authority Board Association for financial markets in the European annual dinner, London November 3, 2016.